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DIARRHŒA—ITS VARIETIES AND TREATMENT.

BY J. MILNER FOTHERGILL, M. D.

Diarrhœa may be a salutary process or an affection threatening existence—according to circumstance. Even when commencing as the first it may eventually run into the latter. The bowel is not only the means by which absorption goes on, and the nutritive matter of our food is assimilated, but it is also the means by which unassimilable material is got rid of. When a quantity of overripe or decaying fruit is devoured, a sharp diarrhœa, by effecting the discharge of the offending matter, is the natural and best means of remedying affairs. Not rarely such diarrhœa is preceded or accompanied by emesis. In a similar way superfluous bile is ejected by what are called bilious attacks. The excess of bile discharged into the intestines by the bile-ducts is re-absorbed, again cast out and then re-absorbed, time after time. At intervals the bile and the other contents of the intestines are swept away in diarrhœa. After this there is experienced a sense of briskness, of energy, never felt when bile is present in excess in the portal circulation. Here the diarrhœa is a natural process of the most beneficial character. In a similar way when the stomach contains indigestible material, which is not got rid of by vomiting, but which passes the pyloric ring, when this reaches the intestines the best thing is its speedy ejection. This is very commonly seen in the diarrhœa which is so prevalent during suckling, both in infants and in young animals. Under these circumstances the diarrhœa usually originates from the excessive curdling of milk in the stomach. This may take place either from the milk being swallowed hastily, and so not being well mixed with saliva —a common cause of excessive curdling—or there may be existing a preternaturally acid condition of the digestive canal, and then the milk forms a firm and utterly indigestible curd, which can only be disposed of by vomiting or by purging. The first is swift, effectual, and uncontrollable. The second is slower, less perfect, and unfortunately somewhat under the control of certain antagonistic—one cannot say remedial—measures. Too frequently in the human infant and calf the income of purgation is the signal for the administration of various members of the pharmacopœia. Astringents and various preparations of opium are the usual agents employed. By such means the natural and wholesome process is thwarted more or less effectually, and the indigestible material retained within the intestine, causing considerable irritation, pain, and discomfort. If the natural efforts are equal to overcoming the unfortunate therapeutic measures the offending matter is got rid of, and all is well. Far from uncommonly, the process is so far checked that an irritating and persistent diarrhœa, consisting of small fluid motions, often offensive in odour, and always preceded by acute griping, obtains for some days. This may have two results. If the offending matter be ejected it is well; if

not, the irritation may go on to enteric inflammation. This last is a very common result in calves subjected to the energetic measures of the farmer's wife or the dairyman, but not an ordinary result in the human infant. Nevertheless, it may and does occur. When the diarrhœa is of the character just mentioned, and has obtained for some little time, the therapeutic measure indicated is a full dose of castor oil. This is the real state of matters. The irritant mass sets up intestinal action and secretion below itself, and so is not removed thereby, such being the case in ineffective diarrhœa; or the natural action set up is sufficient, but is checked by mechanical agents. The administration of a dose of castor oil sweeps the mass away, and then the diarrhœa usually ceases at once. Many years ago a farmer's wife complained to me that her children suffered from persistent diarrhœa, which the ordinary chalk, opium, and catechu mixture was unequal to arresting. After a good deal of cross-questioning it turned out that the family was living chiefly on salted meat, being the winter season. A good dose of castor oil each, followed by a more suitable dietary, had the result of doing away with the necessity for resort to the medicine bottle.

At times, however, this form of diarrhœa persists as intestinal catarrh, requiring its appropriate treatment. Ere considering this part of the subject it may be well to review another kind of diarrhœa which may persist in a like form.

Diarrhœa is not rarely the consequence of a chill. Instead of the ordinary cold, a sharp action of the bowels comes on, especially in those whose digestive canal is easily disturbed. Here the activity may either quickly moderate spontaneously, or persist. The measures here indicated are those suited to the treatment of cold, viz., a full dose of opium alone, or as Dover's powder, hot fluids containing alcohol, and a warm bath. Usually these measures are sufficient to secure the desired end.

At other times the intestinal action persists, as it may when originating in a process of natural ejection of indigestible matter. This may be brought about either as a consequence of irritation existing for some time, and so inducing persistent action, or the morbid action may remain as a species of acquired habit. When no more enduring diarrhœa is set up, a change in our remedial measures is indicated. In some cases the small repeated discharges from the bowel produce excoriation of the anus, while each stool is called forth by intense intestinal pain, ceasing on the evacuation of the acrid fluid. Here it is good practice to give opiates along with fixed alkalies, as in the well-known chalk and catechu mixture, or chalk and opium powder The fixed alkalies not being absorbed, come in contact with the acid secretions of the lower bowel, and so neutralize them. It may even be desirable to resort to enemata of laudanum and starch with a little alkali in each. This last device often gives great relief. At the same time the food should consist of bland materials, as milk as seltzer water, boiled sago or arrowroot, or ground rice. In any form of diarrhœa, indeed, it is of great importance to attend to the diet, which should consist of milk —always rather binding—starch in any form, either with milk or beef-tea.

In the persistent diarrhœa of infants accompanied by much kicking up of the legs, abdominal pain, often severe, if measured by the little patient's cries, sour-smelling stools, containing undigested curd, and frequent "possetting," or eructation and vomiting of curded milk, the following combination will be found useful— R pot. bicarb. gr. ii; ol. cajeput. m. i. aq. anethi or cinnamoni, ii. every four or six hours. If the infant be fed by bottle, some lime water may be advantageously added to the milk; if fed by breast, the mother had better take some alkalies, either medicinally or in the form of Vals, Vichy, or Marienbad waters.

At other times the diarrhœa may pass on from simple acute diarrhœa to the condition of intestinal catarrh. If this be acute and accompanied by follicular ulceration, it assumes the form just described; but it may persist rather as a simple catarrh. Here we find that in addition to the fluid contents of the bowels, no longer changed by the normal absorption, there is a considerable quantity of mucus, often more or less purulent, and even at times a serous exudation of a green colour, from the presence of bile. The mucous lining of the intestinal canal is altered, being thickened and swollen,

while the fluids poured into the bowels are no longer efficiently re-absorbed. Under such circumstances of chronic diarrhœa, opium, from its effects in lessening the activity not only of the peristaltic movements but also of the secretion of the intestinal canal, is indicated in fair doses; and with it may be combined mineral astringents, as acetate of lead, sulphate of copper, or the pernitrate of iron. More commonly opium is given along with dilute sulphuric acid, or aromatic sulphuric acid, and a vegetable astringent, as hæmatoxylin. The last is a most valuable drug, it is palatable and easily taken, and at the same time most efficient. In the chronic diarrhœa of children it is very serviceable; its only drawback is its property as a dye. If spilt on the napkin or passed *per anum* on a diaper it leaves its bright red stain. This, however, is a comparatively unimportant matter. If the case be obstinate the astrigent mixture may be given three times a day, and ten or fifteen grains of compound kino powder every night at bed-time, or a grain and a half of opium with ten grains of trisnitrate of bismuth, or five each of bismuth and myrrh powder, may be added with advantage. Such measures with a proper dietary will usually be found effective.

Nervous diarrhœa is a variety with which we are more or less familiar. An uncontrollable action of the bowels is an indication of mortal fear in animals as well as man. There is increased peristaltic action with relaxation of the sphincter. In a less acute form we find increased action of the bowels in persons undergoing much mental perturbation. In some persons mental agitation invariably produces diarrhœa, just as in others it produces palpitation.

(To be continued.)

ON DIPHTHERIA.

BY THOMAS PRANGLEY, ESQ., AYLSHAM.

[This paper is founded upon notes of fifty-six cases, which occurred in Aylsham, in the year '68; and as the disease has shown a tendency lately to become epidemic in some parts of the country, some of the suggestions of the writer may prove valuable, more particularly those with regard to treatment.]

The variety of forms which the false membrane assumes, and the various conditions of the tonsils, are very remarkable. Thus I have seen the membrane in consistence like glazed starch, cream, wet parchment, and a greyish flesh-like pulp, of all degrees of color, from the purest white to almost black. I have seen it in specks, patches, shreds, and in large firm membranes, forming an exact cast of the part it enveloped. I have seen the specks or patches surrounded by a bright red border, or gradually becoming thinner at the edges, imperceptibly losing itself, so that one could not exactly see how far it extended. I have seen the tonsils engorged to such an extent as to almost meet, or enlarged laterally, as if they had been flattened by a weight on their surfaces; and I have notes of one case in which the tonsils were rather depressed. The glands at the angles of the jaws were more or less enlarged; but I never saw them suppurate.

On a few occasions, after the entire disappearance of the membranes, I found the tonsils again sprinkled all over with small white cheesy spots. These need cause no alarm; for, though they remained *in statu quo* for some days, they always disappeared without further inconvenience.

One of the worst signs in this disease was the extension of the membrane to the nares, so that I looked suspiciously upon the unfortunate patient, who began to use the pocket-handkerchief too freely. This invasion of the nares was manifested by redness of the margin of the nostrils and a discharge of thin mucus, which rapidly became purulent, and, as the disease progressed, very abundant.

Passing over many interesting points in the clinical history of this disease, I proceed to the practical question of its treatment, which resolves itself into local, directed to the throat itself; general, to combat with the great tendency to depression of the vital powers; and individual means to relieve certain symptoms which may arise during its course.

The local treatment I adopted in every case was the application of tincture of iodine (forty-eight grains to one ounce) to every part of the throat covered with membrane, at least once in twenty-four hours, and the inhalation of iodine vapor, mixed with steam, but more especially the latter, if the larynx were invaded. If the

membrane were firm in texture, and not too strongly adherent, I always removed it, and applied the tincture of iodine to the denuded surface, and with the best results; for, although frequently the membrane would reform, yet it never regained its pristine condition. If the membrane were in specks or shreds, I applied the iodine over them, and in general half-a-dozen applications were all that was required to procure their dismissal; and in several instances two applications were sufficient.

The general treatment was supporting and stimulating throughout. A liberal supply of beef-tea, wine, and milk was frequently and regularly given, to maintain the system against the natural tendency to depression and exhaustion. In medicine, I rely upon chlorate of potash and tincture of steel, from three to five grains of the former with five to fifteen minims of the latter every four hours, according to age. When tracheal symptoms arise, I at once have recourse to the inhaler, beginning with ten drops, increasing to a dram of the common tincture of iodine to a pint of boiling water, and letting the patient inhale as frequently as possible. In using this, one precaution is necessary, and that is not to begin with too large a supply of iodine, otherwise it is too irritating, causing the patient to cough, and making him unwilling to use it. I have found ten drops well borne to begin with; and after a short-time, we may gradually increase the quantity to a dram to the pint without inconvenience. If this do good, which it undoubtedly does, it is evident it cannot be by any caustic action, but acting through its modifying and absorbing influence upon the diseased tissue. I can refer to three cases in which this treatment was of marked utility. In cases where the fits of dyspnœa are severe and frequent, I have found nothing like an emetic of sulphate of copper, which generally expels a quantity of membrane from the larynx and trachea, and gives relief for a time at all events.

In trachcotomy I believe we may place considerable reliance, although my experience is limited to one case, and that, unfortunately, a fatal one; yet I firmly believe that if it be resorted to soon enough, we may rescue many lives. There is no doubt one feels inclined to put it off as long as possible; for parents have a curious repugnance to having their children's throats cut; and if you are not successful, they speculate on what assistance you afforded nature in her process of dissolution, and generally the balance is against the doctor; yet the evidence of numerous published cases, of which, roughly speaking, one-fourth were successful, proves that it is our duty not to neglect this chance of saving life, and more especially not to delay too long in resorting to it.—*British Medical Journal.*

CONSUMPTION AND CONTAGION.

By Richard Payne Cotton, M.D., F.R.C.P.,

Senior Physician to the Hospital for Consumption, etc., Brompton

There is no question in connection with phthisis of more practical interest and importance than that of contagion; and there is none other, perhaps, about which there exists so great a diversity of opinion. Practical evidence is of far more value than anything speculative; and as a great experiment upon the zymotic character of phthisis has long been going on at the Consumption Hospital, Dr. Cotton briefly gives the results.

"The Consumption Hospital was opened in the year 1846, with ninety beds. Ten years later later it was completed; and since that time two hundred beds have been constantly occupied. We have lost, during this long period, only one nurse from phthisis: and this was a poor creature whose husband had deserted her, and who had long endured, from other causes also, considerable mental anxiety and physicial exhaustion. On the other hand, the services of the nurses generally have been unusually prolonged; and I can myself testify to their general health being, as a rule, remarkably good. Of those *now resident*, two have been at duty in the hospital seventeen years; one has resided thirteen years; one, eleven years; two, ten years; two, nine years; one, seven years; one, four years; two, three years; and four, two years. The two oldest nurses have lately died of old age and general decay, after having long been superannuated; each of

these had resided in the hospital for upwards of twenty years.

"Of the gallery maids, whose duty it is to be much within the wards in sweeping and scrubbing the floors, only one has been known to have been affected with phthisis; whilst it is obvious that, during so long a period, the number of persons thus employed must have been considerable.

"Our engineer has seen eighteen years' duty within the hospital, and he is now in good health.

"We have had, at different times, three attendants in the *post-mortem* room. The first of these is still living, but in infirm health, the result of intemperance; the second left with spinal disease; the third has been in his office for nearly four years and is in good health.

"Of the dispensers, one who kept to his post for above ten years, is living and well; three who have held office in the dispensary since the year 1867 are also well; and the present senior dispenser has been with us for ten years. Many others have been in this department since the opening of the hospital, but only one has been known to have been consumptive.

"The resident clinical assistants of whom we are able to obtain reliable information amount to seventy-eight in number. Three of these are said to be phthisical; but only one has been known to have died of phthisis. This gentleman I knew intimately; he was always of consumptive appearance, and one of his sisters had died of phthisis.

"Our resident medical officer, Mr. Edwards, to whom I am indebted for the statistics I am now giving, has held office for more than twenty-one years; and all those who know him can testify both to his continued health and his undiminished energy and usefulness. The present matron has also been in her office for more than twenty-one years, during which long period her health has been excellent.

"The present secretary has been at his post for fifteen years; and his only predecessor, who is still alive and well, has held the same office for sixteen years. The assistant-secretary has been at his duties within the hospital for eighteen years; and a clerk—whose office it is to register the out-patients, and who must, on that account, be exposed to an unusually great extent to phthisical contagion, did such exist—has been at his work for five years. I am happy to add that all of the above are now in excellent health.

"The present chaplain has been with us for twenty-two years; and his two predecessors are still living. Happily all of them are well.

"Of the staff of physicians and assistant-physicians—nineteen in number—one only has been affected with phthisis, and he was a young man of delicate and decidedly consumptive aspect. The period of office which some of us have had is unusually long. Of the present physicians, two have been upon the staff twenty-four years each; one for seventeen years; one for thirteen years; one for nine years, and one for five years. The late senior physician, who resigned only three years ago, had been attached to the hospital, and in constant work there, from its very foundation. Two of the former physicians who resigned their appointments, and subsequently died of disease quite distinct from phthisis, had held office in the hospital f r fifteen and nineteen years respectively.

"With the above facts before us, must it not appear to all believers in the doctrine of phthisis originating in a special and contagious poison, that a residence in the Consumptive Hospital and long-continued working in its wards is a very good way indeed *not to catch the disease?*"—*British Medical Journal*

TREATMENT OF TYPHOID FEVER AT MT. SINAI HOSPITAL.

Within the past year there have been treated at this hospital over sixty cases of typhoid fever, and out of these only one death occurred. This was due to perforation. The plan of treatment pursued is the antipyretic, and in this manner it is claimed that the mortality is less, and at the same time the patients do not suffer from delirium. Cold baths are employed when the temperature reaches 103°, unless contra-indicated by some special reason. If the temperature is only 102°, or if the patient is debilitated, sponging the body with water is had recourse to. The aim of the treatment is

to keep the temperature below 102°, and for this purpose it is necessary, if baths are employed, to repeat them every few hours in the more active cases; but, in the milder ones, from two to four every day may be sufficient. One of the most important features connected with this treatment is, that no delirium occurs during the night. In one case, where active delirium ensued, the patient was given a bath, and immediately the delirium disappeared The internal treatment consists in the administration of quinine and whiskey, with appropriate agents for the control of the diarrhœa, and of these, bismuth in twenty grain doses has proved most efficacious.—*New York Medical Journal, December.*

SUDDEN DEATHS FROM PARACENTESIS THORACIS.

M. Legroux relates one case before the Paris Hospital Medical Society. The patient was a man of prior good health, fifty-two years of age, and on admission presented an immense effusion from a pleurisy of a month's duration. About two litres of liquid had been discharged to the great relief of the patient; but, after coughing, and speaking quietly for a while, he complained of feeling faint, and suddenly died. The autopsy furnished no explanation of the fatal occurrence. M. Legroux concludes as follows: 1. That sudden death, which is frequent in pleurisy with abundant effusion, is also to be feared when a large quantity of fluid has been withdrawn by operation. 2. This mode of death is probably due to syncope. 3. The liquid should be slowly evacuated, and at two operations in preference to a single one. 4. The aspiratory apparatus may be supposed to have something to do with this fatal accident. 5. A person who has undergone this operation should be carefully watched for some time after its termination, so that aid may be furnished at the slightest sign of syncope.—*London Medical Times and Gazette.*

Another case was reported at the same Society by M. Besnier. The case was that of a middle-aged lady who had suffered for a fortnight from the signs of an extensive effusion on the right side. On puncture with the aspirator, a sanious and extremely offensive fluid was evacuated. Scarcely half a pint had been slowly withdrawn when the patient suddenly became extremely pale, her features became fixed, and it was found that the heart had ceased to beat, and the other lung to breathe. There was no *post mortem.* M. Besnier suggests that the mere pain of the puncture may have reflexly arrested the heart.—*New York Medical Journal.*

BRIGHT'S DISEASE.

Prof. A. L. Loomis, of the University of New York, in a clinical lecture, in speaking of the treatment of this disease, said: I recommend a remedy which will increase the urinary secretion without stimulating the kidneys. That remedy is digitalis. I am convinced that it does not act as a stimulating diuretic, but that it acts upon the local circulation of the kidneys. Inducing an increased flow of urine in this way, we rid the system of its urea much more completely than we can by the skin or bowels, for these are both unnatural ways of eliminating it.

One word with regard to digitalis. We have, for many years, been taught to believe that while administering this drug, we must guard against its "cumulative effects," so called. All this I have come to disregard; for I have repeatedly administered half ounce doses of the strong infusion every two hours for forty-eight hours, and have never seen any unpleasant effects from thus using it. If any benefit is to be received from this drug in this disease, it *must* be administered in large doses. The dose which I usually recommend is ℥ss of the infusion; and in the acute stage of Bright's disease, it may be given every two hours for twenty-four hours, and then wait a little and watch its effects. If the diuretic effects are not satisfactory they may be increased by the additions of bitartrate of potassa. Its administration, in more moderate doses, say ℥j three times a day, must be continued for weeks. In those cases in which the exudative matter filling the tubes is the result of a catarrhal inflammation of the tubes, if it can be washed out, nature forms new epithelium for the repair of the tubes, unless the stimulants which have produced the increased secretion of urine are continued. Hence the necessity of watching the effect of

the remedy. The external application of dry cups over the kidneys, and following them with poultices, are of service. The digitalis leaves may be used for a poultice after the dry cupping, and thus applied, they will increase the diuretic effect of the drug administered internally. After the use of dry cups, and the congestion and hyperæmia to some extent are relieved, if your uræmic symptoms are still urgent, you may resort to hot-air baths and hydragogue cathartics. This makes the principles for the accomplishment of the first proposition in the management of acute Bright's disease.

And now let us consider the effect of the urea. This is the element that produces the convulsions; perhaps the patient has already had one or more when you are called to see him. What are the means that we have for controlling the effects of urea upon the nervous system? I believe that opium is, of all drugs, the best. If called to see a patient who has already had a convulsion, I should not hesitate to throw into his arms ten, fifteen or twenty drops of Magendie's solution of morphine, by the use of the hypodermic syringe. It will not kill him; but, upon the other hand, I have seen it, many times, produce a calm, quiet sleep, profuse perspiration, increase the flow of urine, and within a few hours the patient awakes to consciousness as the result.—*The Cincinnati Medical News.*

CASE OF EMPYEMA TREATED BY FREE EVACUATION OF THE FLUID.

The following case, recently under the care of Dr. Wilkes, Guy's Hospital, London, is of interest, illustrating the great benefit that is often derived from freely opening the chest in these cases. A thin, delicate woman, aged twenty-one, was admitted on the 13th inst., apparently moribund. It was ascertained that the patient was quite well until eleven months ago, never having had any illness, except small-pox when a child. The father died of hemoptysis, at the age of forty-five, and the mother and brothers and sisters are living and healthy. Eleven months ago the patient caught cold, and suffered from cough, accompanied by pain down the sternum. This pain was always much increased by coughing. There were never any rigors, but there was some delirium at the commencement of the the illness. She stated that on one occasion she spat up two quarts of blood. She was for six months under treatment in an infirmary; during that time she suffered great pain in the right side of the chest, together with cough, shortness of breath, &c. She then went home, unrelieved, and remained there four months, when, becoming worse, she was admitted to Guy's.

On admission she was thin and delicate-looking; skin, hot and dry; voice, feeble and husky; and there was a constant hacking cough. Just below the right mamma was a red, hot, tender swelling, and there was extreme tenderness over the whole of the lower part of the thorax, from the spine forwards, and also over the liver, and on deep pressure, throughout the whole of the abdominal region. There was dulness of the whole of the right side of the chest in front; below the third rib the dulness was absolute, and in this part there was entire absence of vesicular murmur. Above the third rib there was increased vocal resonance and tubular breathing. The left front was resonant throughout; the vocal resonance increased, and breath-sound tubular. At the back, on the right side, there was absolute dulness, and absence of breath-sounds below the spine of the scapula. Above this there was tubular breathing and increased vocal resonance. The left back was resonant, and the respiration exaggerated. The apex beat of the heart was diffused, and one inch below and half an inch outside the nipple there was a cardiac bruit of a churning sound, most audible at the apex. Temperature on morning of admission, 103°.5 F; in the evening, 100°. F; respiration 36; urine sp.gr., 1012; no albumen or sugar.

On the evening of the 14th an incision was made into the front of the chest, where the pus was pointing. A catheter was then introduced into the pleural cavity and made to point behind, where another incision was made. About 16 oz. of fluid escaped. A drainage tube was then put in, and the cavity washed out with a solution of carbolic acid, (1 to 40). Next day the patient was decidedly better, and the temperature was normal. On the 16th, both

sides of the chest expanded fairly well below the clavicles. The right side was hyper-resonant in front, but rather dull behind, with marked ægophony and very slight vesicular breathing. The breath-sounds were harsh, but vesicular below the right clavicle; in the left front they were puerile. At the back the breath-sounds were bad on both sides. On the 19th, patient stronger and better—cough had ceased. On the 21st the drainage tube was withdrawn, and the washings, which had hitherto been performed daily, were now ordered to be done every other day. On the 25th the patient was sitting up in bed, unsupported, though still weak. The right subclavian region was resonant, and below this the chest was hyper-resonant. There was, however, no tactile vibration, although vesicular murmur could be heard at the inner half of the right subclavian region. At the back the right supra scapula region was normal, but below this there was dulness, with distant and feeble breath-sounds. There was fairly good tactile vibration. The temperature was normal, and had been since the operation, but the respirations were still very frequent, 38 per minute.

Remarks.—Free opening has been so uniformly successful in these cases, that Dr. Wilkes alleged that he would always recommend it in empyema, and experience has shown that this advice is in the main thoroughly sound.

For, notwithstanding the adverse opinion of many of the older teachers, and even of many of the present day, it must be confessed that the lives of patients have been sometimes unmistakably sacrificed to the efforts to save the lung. The practice of tapping has again and again been denounced as likely to damage the lung. In former times, even when the operation was sanctiond, it was done with a sparing hand. A few ounces of fluid were allowed to escape, and then the puncture was firmly closed. But as the patient did not improve, the operation was repeated in the same niggardly manner several times, at longer or shorter intervals. After all, the patient too commonly died with a chest full of fluid, a large share of which was, not without reason, often attributed to the evil effects of tapping whereas, if free evacuation had been insured, the result would in all probability have been vastly different. When there is pus in the pleural cavity, Dr. Wilkes maintains that the lung is destroyed, and that it is useless to attempt to restore it to its natural state. There is, however, one exception to the universal adoption of tapping in empyema. Often in children, large quantities of pus collect in the pleural cavity, but afterwards become entirely absorbed, leaving the lung practically unimpaired. In such cases, to establish a communication between the outer air and the pleural cavity would not only be unnecessary, but might be attended with evil results, and lead to irreparable collapse of the lung.—*Lancet, Oct. 30th*, 1875.

TREATMENT OF DIABETES.

In the London *Lancet* of November 6, we notice a new method for the treatment of diabetes, originating with a non-professional patient suffering from that disease, and which we think worthy of trial, as likely to afford relief if it does not effect a cure. The patient had been under dietetic treatment for several years without deriving any benefit; decreasing in weight and becoming despondent,—the urine being still loaded with sugar. His discovery, as he terms it, about the treatment of diabetes was made in this way: "He found that he commenced to wheeze when he breathed the cold air, and that it ceased when he returned to a warm room. On putting his head below the bedclothes a slight perspiration came upon him, the saliva returned, and his tongue and mouth became moist, instead of dry as formerly. This moisture and dryness of the mouth alternately occurring, under the conditions mentioned, having arrested his attention, the question arose in his mind, how could this moisture be obtained without remaining in bed? To accomplish this he put on a respirator, and also a knitted woollen cloth over both the respirator and his nostrils when in the house, or even in bed, and was careful in protecting the nostrils as well when he went out. He also practised breathing by the nostrils alone, and found breathing in this way highly beneficial. Having perfected himself in breathing by the nostrils

alone, he laid aside the respirator, taking care however to wrap up warmer in cold weather. He refrained from all cold diet or drink, invariably taking them warm. Under this treatment he improved rapidly—the quantity of urine and sugar steadily decreasing—while his weight increased. In six months the sugar entirely disappeared, and he acquired his natural health, and has continued to enjoy it for two years. He still continued, however, to be careful in his diet—milk (heated) being the staple."

Dr. Charteris, of the Glasgow Royal Infirmary, reports two cases treated in this way, in both of which decided improvement followed; the patients being able to resume their work, though the sp.gr. of their urine remained high, and contained sugar. In the one case the quantity of urine passed per diem was reduced from 248 oz. to 100; in the other from 330 oz. to 100.

TREATMENT OF A COMMON COLD.

Dr. J. Milner Fothergill offers (*The Practitioner,*) some instructive remarks on this subject. "Colds," he states, "are always the consequences of a chill, either to the general surface or a portion of it. Ordinarily the body temperature is maintained by the equilibrium existing betwixt the internal heat-producing area and the external heat-losing area—the surface—according to Rosenthal. When excessive heat-loss is not met by increased heat-production, a chill or lowering of the body temperature is the consequence; or if heat-production has been great, as in a ball-room, for instance, the cutaneous vessels are dilated, and if the surface be suddenly exposed to cold these dilated vessels are apt to be paralyzed instead of incited to contract, and then heat is rapidly lost from the mass of warm blood in the cutaneous vessels. The catching cold, or the escape from doing so, depends upon the state of the vessels of the surface and their capacity to contract or the opposite. Consequently we can see that catching cold or escaping it under apparently identical circumstances depends upon a condition far removed from either vision or sensation. That the *modus operandi* of catching cold under these circumstances has offered opportunity for difference of opinion, can be no matter for surprise. Rosenthal, however, has scientifically investigated the matter and unravelled the mystery. Where heat-loss is met by heat-production at the time, no unpleasant consequences result; but when the heat-regulating processes are delayed, the loss of heat and fall of temperature at the time are followed by an excessive heat-production, constituting a pyretic condition. This in its simplest form is recognized as a cold. Usually it is accompanied by some disturbance of the respiratory tract, either in the turbinated bones, known as nasal catarrh, as sore-throat, or as an attack of bronchitis. Of course these local inflammations may become very severe, and in bronchitis life is commonly threatened. There is at this point great vascularity of the internal heat-producing area, and a dry skin, whose heat-losing power is impaired from the loss of the aid of perspiration: for Leyden found that even the insensible perspiration is lost in increasing fever.

"What are the indications furnished to us for the treatment of this state of matters? Obviously to restore the balance betwixt the two heat-producing and heat-losing areas; and in order to do so we resort to such measures as shall increase the amount of blood in the outer area, and so diminish the amount in the internal area; that is, to increase heat-loss and lessen heat production.

"The measures ordinarily resorted to for such ends are hot fluids, a warm bed, and often a dose of opium in some form. The result of such combination is the induction of perspiration, especially if the patient lie in bed next morning and have more hot fluids; for perspiration is most successfully induced from seven to nine in the morning. If the cold be caught at once by such measures the impending pyrexia may be averted, and the temperature equilibrium be maintained. More commonly, however, the case is more advanced when seen, and the pyrexia is clearly established. Under these circumstances the treatment will be more prolonged, and restoration of the heat-balance will not be so readily attained. The condition of increased vascularity of the heat-producing area with arrested action of the skin is to be met by

the administration of agents which possess the combined properties of lowering the heart's action and relaxing the vessels of the skin; or, in other words, which relax the two muscular ends of the circulation, the central and the peripheral. The impression so made produces a diminution in the blood current and a dilation of the vessels of the heat-losing area. As a consequence of this there is less blood in the internal area and less heat-production, with cutaneous vascularity and increased heat-loss; rarely, however, is an impression made upon the pyrexia until the action of the skin is excited and the cooling effects of exhalation attained. The administration of nauseant diaphoretics to attain these ends has been the rule amidst practitioners and housewives. The time-honoured antimonial wine has scarcely yet yielded to its rival ipecacuan, nor, perhaps, is it desirable that it should. Their combination is good, and to be recommended. In adults, iodide of potassium in guaiac mixture forms an excellent combination, especially when the cold is combined with rheumatic pains, or tonsilitis. These internal remedies may be aided in their action by external measures, such as warm baths. With children it is easy to wrap them up in a blanket wrung out of hot water, to inclose them so wrapped in a dry blanket, and put them to bed. This may be repeated as required, and sufficiently aids the remedies given by the mouth. Measures for giving adults a warm bath in bed are now to be procured at little cost. After perspiration is once induced there is usually a gradual fall of temperature; but the normal may not be reached for some days. There is a decided tendency to excessive heat-loss after the action of the skin has been established, even though the temperature indoors be above the normal. Experience has taught humanity to wrap up well when passing through a cold, especially when it is breaking. Ere the action of the skin is re-established, the impression of external cold is grateful, but afterwards chills are readily experienced. The increase of blood in the heat-losing area permits of rapid heat-loss. When a cold is caught during the restorative period, it is usually a fixed one, and not rarely serious illness is the consequence.

"When the action of the skin is re-established, it not uncommonly happens that perspiration is profuse, even while the patients are wrapped up well to shield themselves from heat-loss. This is a troublesome stage in the history of a cold. Here mineral acids with vegetable tonics are indicated, and, perhaps best of all, dilute phosphoric acid in cascarilla or cinchona. In the treatment of influenza, vegetable acids along with a bitter tonic often produce a decidedly good effect. In addition to the general effect of the tonic, the arrest of the excessive activity of the sudoriparous glands is desirable. This stage is sometimes a prolonged one, and the maintenance of a pyretic condition by the rapid loss of heat and then increased heat-production is not an uncommon event. If this condition be pronounced, the best line of treatment is that of quinia with an astringent mineral acid. Quinia is well known to possess an apyretic action, probably to some extent by its effects upon the nerve-centres, and more, according to the observations of Binz, upon its checking the ozonizing action of the blood. The effect of the astringent mineral acid upon the skin is to check secretion, and by these combined measures a satisfactory restoration to the ordinary state of health is induced.

"In the treatment of the bronchial affections which so commonly accompany an ordinary cold, it is not a matter of indifference what expectorant remedy is selected. As long as the skin is dry and the bronchial lining membrane tumid and secretion arrested, ipecacuan with acetate of ammonia is indicated: or a little antimony may be added with advantage. When the skin is once thrown into action and the bronchial secretion also established, then acids with syrup of squills are suitable measures. But it is not a succesful plan to administer squill with acids until the skin is moist. When there is a tendency to the free action of the skin, this latter combination in full doses is a useful plan of treatment. Neither is the union of carbonate of ammonia and senega in severe cases indicated until the secretion alike of the skin and the bronchial lining membrane is thoroughly established.

"The treatment of a cold consists really in hastening and abbreviating the ordinary pro-

cesses by which a rude disturbance of the temperature-balance of the body is recovered from. In order to do this a fair comprehension of the natural processes must exist, so that the remedial measures may harmonize with, and not contradict these natural processes,"—*American Journal of the Medical Sciences.*

Surgery.

PLASTER OF PARIS DRESSING IN ANGULAR CURVATURE OF THE SPINE.

In the New York Medical Journal for September, we find a lecture by Dr. Sayre on the above, to which we propose devoting a short space, partly on account of the unsatisfactory results from the usual modes of treatment, and partly on account of the simplicity of the means there proposed.

We pass over the lecturer's remarks on the pathology and symptoms, into which he enters at some length, only premising that *we* hardly think the diagnosis so easy in the early stage that "mistakes need not be made."

Dr. Sayre pays a well-merited tribute to the value of Dr. Fayette Taylor's spinal support, which in our estimation is certainly a most valuable aid in the treatment of Pott's disease, when intelligently applied and adjusted to the often varying conditions of the patient; and yet the lecturer makes a most ungenerous remark when speaking of a modification of the instrument which adapts it to those cases in which the disease is situated above the fourth dorsal vertebra, a remark evidently prompted by a complete misapprehension of the principle on which the instrument acts, or the part of the spinal column on which the weight of the head is received when transmitted through the chin piece.

But the point to which we would draw attention in the lecture is the application of plaster of paris. This dressing is very cheap, and easily applied, and thus comes within reach of a large class of patients too poor to buy the expensive steel supports; and in all those cases in which the disease is situate below the level of the axilla, it may be found to accomplish all that is required; but in all those cases where the curve is above that point, (and in our experience they constitute a rather large proportion) we fear something more complex and more expensive will still be required.

The Doctor has applied this dressing in the treatment of over thirty cases of Pott's disease, and with the happiest results. He says "The plaster dressing can be changed or removed as often as necessary to accommodate the increasing growth or development of the patient."

"The ease of application in any section of the country, without the trouble and expense of resorting to any specialist or instrument-maker; the perfect comfort given to the patient by protecting the diseased parts from pressure, without galling or chafing any other part, as is almost always done even by the best fitting instrument; and the absolute immobility which can be obtained by the plaster-bandage, will, I feel confident, give this plan the preference over any yet adopted for the treatment of Pott's disease, or caries of the spine."

In applying the plaster of Paris dressing for Pott's disease, the patient should be suspended by the arms till the heels are off the floor; the body then acts as an extending force; but as it is difficult for an assistant to hold these patients long enough to apply the dressing, save in the case of very small children, he has had constructed an apparatus which consists of a curved iron rod, with a hook in its centre and at each end. From the end hooks loops or pads pass down under each axilla. To the centre hook a pulley is attached, and the opposite pulley is secured to the ceiling, and the patient is easily elvated till the toes barely touch the floor. In some cases it will be advisable to cross the suspending bands from the axilla of one side to the hook of the other, on account of the pressure on the axillary plexus.

The first case to which the Doctor applied the plaster of Paris dressing was a child four years of age, "with angular curvature of the spine, involving the last two dorsal and first upper lumbar vertebræ, unable to stand, very much emaciated, and the right limb paralyzed." He says, "I had the child held up by the arms (the weight of the body acting as an extending force), pinned his little flannel shirt around his thighs, stretching it over his body smoothly,

and commencing at the pelvis, applied rollers saturated with plaster of Paris over his entire trunk, the same as you would to the thigh in dressing a fracture. He was held in this position, suspended by the arms, twenty or thirty minutes, till the plaster set. His parents say he has been perfectly comfortable ever since the dressing was applied, six weeks ago, and has grown quite fleshy, and is now able to walk about without resting his hands upon his knees."

The Doctor relates several cases which illustrate this plan of treatment, and show some modifications necessary in certain peculiar cases.

"Case I. Pott's Disease. John Jordan, aged five years, of perfectly healthy parents, had hip disease in 1871, of which he had been completely cured. In January, 1873, Pott's disease appeared in the lumbar region. . . . He continued to run about with a raw-hide jacket on till June 4th, 1875, when a plaster of Paris dressing was applied. The child was suspended by his shoulders, a flannel shirt having been adjusted to his body, then a bandage saturated with plaster of Paris was carried around the pelvis and up to the axilla. The plaster dried readily, and the child was sent home, feeling very comfortable. Was sent for that evening in great haste, the mother saying he could not *lay or sit*, and found him suffering from too great compression of the thorax. I therefore made an incision of about three inches from the top, through the plaster of Paris dressing, which gave instantaneous and perfect relief. This dressing was worn till July 26th, when it was found that a fold in the shirt had produced uneasiness. It was then taken off, and a slight abrasion over the crest of the left ilium discovered. . . . The child came to the office on the 31st, when, the abrasion being healed, he was placed in the extending apparatus again, and another dressing of plaster of Paris applied as before. After the plaster had dried the child walked about the office, feeling very comfortable. On the following Tuesday he went on an excursion, and up to this day, August 12th, has suffered no pain.

"Case II. Pott's disease, from injury. Mr. W. was brought to me July 26th. . . . . Was out riding and thrown from his waggon, striking on his left side and back; was unable to move for a short time; about two hours afterwards regained perfect control of himself. . . . . Very much emaciated, constriction around the abdomen causes intense pain, cannot walk or lie on his back with any comfort, can only lie on abdomen, *even then* requires to be pulled out to be free from pain; suspending the body, the arms being thrown over the shoulders of another person, gives perfect relief. I applied the plaster dressing . . . . and when it was dry he said he was more comfortable then he had been for twelve months. The next day he called and said the principle was correct, but that it had been applied imperfectly. His back had a vacant space on each side the entire length, and that it wanted filling up. He was so very thin that the spinous processes projected to such a degree that the bandage bridged over a vacant space on each side, and he felt the want of this support. . . . . When he came on Friday, he stated that he had made another discovery; that he had no room to put his dinner, and wished me to fold a pad over the abdomen, and bandage over it, so that, when the plaster had become set, it could be pulled out, and the rest of the dressing not be disturbed. . . . . I placed several strips of plaster bandage on each side of the spine, and after padding the abdomen as suggested, I dressed him as usual. Patient called at my office five or six days afterwards, and stated that he had never been so comfortable since he was hurt."

Several other cases are given in which this dressing appears to have been followed by like results. In one an abscess had formed alongside the angle. A free incision was made, and an opening left in the plaster of Paris dressing for the escape of pus.—Ed.

ON THE PATHOLOGY OF "HIP" DISEASE.

By Thomas Annandale, F.R.S.E.,

Surgeon to the Royal Infirmary, and Lecturer on Clinical Surgery.

Constitutional causes are no longer held to be the chief agents in producing hip or other joint diseases, but the tendency of surgeons now is to attribute most of these affections to *local* causes, and more particularly to injuries of all kinds. Joint diseases do undoubtedly not unfrequently occur in strumous or un-

healthy patients, and are then not so amenable to treatment and less satisfactory in their results owing to constitutional and other complications; but even in these cases local injuries are usually the exciting agents of the disease.

"Hip" disease may be *acute* or *chronic* in its nature. In the majority of cases the disease is more or less chronic as distinguished from the very acute form of joint disease; but cases are occasionally met with which run their course in a few days or weeks, and end in early suppuration and rapid destruction of the joint textures. I have seen such a case—not pyæmic in its nature—terminate fatally on the tenth day, and the post-mortem examination showed suppuration of the joint, complete destruction of the articular cartilage of the head of the femur and acetabulum, and extensive destruction of the head of the femur itself and osseous walls of the acetabulum.

The question as to which joint structure is primarily affected in hip disease must still be considered a disputed one. * * *

Having myself, with the aid of antiseptic treatment, incised and examined many diseased hip-joints at an earlier stage of the disease than that in which incisions are usually practised, I have come to the conclusion that, although the disease may orginate at times in the synovial membrane or pelvic bones, it most frequently commences in the head of the femur. When examining cases of disease in the early stage of destruction of the joint textures, I have found in the majority little implication of the acetabulum or its cartilage, but well-marked destruction of the cartilage covering the head of the femur, and other signs of pathological changes in this bone. I can confirm the observations of Holmes, Bauer, and others as to the early destruction of the ligamentum teres, for I have invariably found this ligament wholly or partially destroyed, but I think that this condition is secondary to osseous or synovial inflammation, and that it does not originate in inflammation of the true ligamentous tissue.

The very acute cases to which I have referred, have, I think, their origin in acute synovitis, which is quickly followed by suppuration and disorganization of the joint structures, and I also believe that sometimes synovitis of a more chronic nature may be the primary origin of hip disease. * *

In the early stage of the disease a cure may take place with little or no alteration of the joint structures or functions; but when suppuration has taken place, and more especially it it has been left unrelieved for some time, the joint does not recover without some changes.

The simplest of these changes is fibrous anchylosis, which is usually preceded by the destruction to a greater or less extent of the cartilage and superficial articular surface or surfaces, and by some enlargement or deepening of the acetabulum. New osseous deposits may also take place in and around the diseased joint.

This form of anchylosis is well shown in a pathological specimen taken from a section of a hip-joint removed by me after death. In this case the disease had become cured, but the limb was shortened fully an inch, and its movements at the hip were very slight. * *

Occasionally complete osseous anchylosis takes place, the remains of the head or neck of the femur and the pelvic bone forming a continuous bony structure. Of this condition, I have in my collection two preparations. * *

In these conditions of natural cure, there may or may not be deformity of the limb. There is always shortening, and unless the case has been carefully treated, the thigh is frequently fixed in a flexed position, forming a more or less acute angle with the pelvis, and so rendering the member comparatively useless.

CAN ARSENIC CURE PEMPHIGUS?

A Lecture,

By Jonathan Hutchison, F.R.C.S.

* * So far as my own experience is concerned, I should have felt myself quite justified in doing that which, indeed, I have done many a time in the wards, telling you dogmatically that arsenic is the one remedy for pemphigus. As I find, however, that the opinions of some other observers do not, on this point, accord with my own, and that especially our renowned teacher—I allude to Professor Hebra, of Vienna—is still in the habit of expressing his conviction that we know of no in-

ternal remedy which exercises any influence over this disease, I feel it to be my duty to attempt a somewhat detailed examination of the facts.

In the *Medical Times and Gazette*, for February, 1854, I wrote a report on eighteen cases of pemphigus, observed at different hospitals, but chiefly under the care of Mr. Startin, at the Blackfriars Institution for Skin Diseases, and some of the conclusions given at the end of that report were in these words—"That arsenic may be esteemed almost a specific remedy even in the worst class of cases; that arsenic does not merely repress the eruption, but remedies the unknown constitutional cause on which that eruption depends, always very much benefitting the general health of the patient; that it does not prevent the liability to subsequent attacks, but that such attacks are always much less severe than the original one, and tend, if treated by the same remedy, to diminish in intensity on each successive occasion." Since that report was written, now more than twenty years ago, I have seen a considerable number of cases of pemphigus, and, with the exception of one instance, in which the mucous membranes were severely involved, and in which the patient died, I have not met with a single case in which the disease resisted the treatment. Some have been cured with greater rapidity than others, and some have required a little management as regards the apportioning of dose, etc., but in none did the arsenic fail to show its specific power, and in the end to produce a cure. Thus, instead of regarding pemphigus as a very serious and usually incurable, often fatal disease, I have come to consider it as one of the most hopeful, and since there are few greater pleasures than the successful wielding of drugs, have been always very glad to receive a new case. * * * *

By others who have written on the subject since my report was published, very different opinions have been expressed, but nearly all speak far more favourably of arsenic than does Professor Hebra. Those who discredit the remedy the most are Professor Bazin and Dr. Dyce Duckworth. * * * * *

I assert my belief that arsenic is a specific for the state of health upon which relapsing pemphigus depends. I do not include infantile pemphigus, which is a wholly different affair, and mostly syphilitic, nor do I include any ill-marked cases, respecting which the diagnosis is doubtful. The cases which occur in children, (not infants,) are often amongst the best-marked, and are, of course, included, whilst those met with in the very old are often indefinite and of uncertain character. I make no strong distinction between acute and chronic, since many of the latter were acute at first, and are simply half-cured cases; but I admit that there are conditions in the most rapid and severe, in which the patient may possibly be too ill for the remedy to have a fair chance. Nor is it my assertion that arsenic will cure pemphigus without regard to dose or time; and should any in the future publish cases in which it has failed, I must beg them to be kind enough to state in detail the doses and the length of the trial. Although I have not for many years, either at the London, at Blackfriars, or in private practice, had a single case which has not been cured, I have had several which resisted the remedy for a time, and which might easily have been recorded as failures. It seems to me as possible that, after all, the main reason for the difference of my results, as compared with those of some others, is that my mind has been long imbued with an almost implicit faith in the remedy. I have believed that arsenic could cure pemphigus, and I have never thought of resorting to anything else. If the eruption resisted for a while, I have pushed the remedy and increased the dose. In a case in this hospital, a little girl did not get well until I insisted that the Sister of the ward should see the child take her medicine, then the pemphigus vanished. In the case of a patient brought to me by Mr. W. W. Edwards, of Bromley, we soon reduced a severe and copious eruption to a very sparing one, and got the woman into good health, but for six months we could not make the bullæ wholly disappear. Finally, however, by a considerable increase of dose, it got quite well. This was the most intractable case that I have had under care, (if I except the one already noticed, which was rapidly fatal.) Next, let me say clearly that I do not assert that arsenic will cure pemphigus beyond risk

of relapse, but rather wish it to be distinctly understood that the remarkable proneness to relapse when the remedy is suspended is one of the most positive proofs of its specific efficacy. In many cases the evidence of benefit is apparent within twenty-four hours, and in some, if the remedy be suspended, a relapse will occur within a period almost as short. This is a very remarkable fact, but you will find it illustrated, I think, in several of the cases which I am going to quote. To cure, you must persevere; to prevent relapse after cure, you must persevere. A half-cured case is, according to my experience, quite certain to relapse directly. Very probably it is this tendency which has induced some prescribers to distrust the drug. The patient may for a day or two have missed his medicine, and out comes the eruption again; and the surgeon not being informed of what has happened, concludes that arsenic has failed, and prescribes something else. Precisely what I am suggesting once happened to myself, and it was with considerable difficulty that I got at the real facts. But although arsenic does not prevent relapse in the early periods of treatment, or even of cure, yet I firmly believe that it does so to a large extent, if given repeatedly and long enough. Each relapse after an arsenical cure is less severe than the first, and more easily treated, and finally the patient ceases to be liable. * * (Dr. Hutchison then gives the history of nineteen cases, and the results of their treatment by arsenic, which show very conclusively that this remedy proved to be as nearly a specific in this peculiar form of disease as any remedy known by that name. There is one noticeable feature, too, in Dr. Hutchison's treatment of pemphigus, namely, that he relied upon, and had the most encouraging results from, exceptionally small doses of arsenic. He rarely gave more than 3 minim doses of Fowler's solution to an adult; but he recommends that when the case proves obstinate, increased doses should be given proportionate to the age of the patient, and the tolerance of his system for the remedy.)—*Medical Times and Gazette.*

Toothache.—Let the patient hold in the mouth a little solution of bicarbonate of soda.

A REVIEW ON CASES OF INTUSSUSCEPTION ON RECORD.

By Jonathan Hutchinson, Esq.,

Senior Surgeon to the London Hospital.

1. That it is by no means very uncommon for intussusception to begin at the ileo cæcal valve, and to progress to a such length that the invaginated part is within reach from the anal orifice, or even extruded.

2. That it is of great importance in all cases of suspected intussusception to examine by the anus.

3. That in almost all cases of intussusception in children, and probably most in adults, the diagnosis may be made certain by handling the invaginated part through the abdominal wall.

4. That the prognosis of cases varies much; first, in ratio with the age of the patient, and secondly, with the tightness of the constriction.

5. That in the large proportion of cases in which children under one year are the patients, death must be expected within from one to six days from the commencement.

6. That in the fatal cases, death is usually caused by shock or by collapse from irritation, and not by peritonitis.

7. That in many cases it is easy, by estimating the severity of the symptoms (vomiting, constipation, &c.), to form an opinion as to whether the intestine is strangulated or simply irreducible.

8. That in cases of strangulated intussusception, whilst there is great risk of speedy death, there is also some hope that gangrene may be produced and spontaneous cure result.

9. That in cases in which the part is incarcerated and not strangulated, there is very little hope of the occurrence of gangrene, and it is probable that the patient will die, after some weeks or months, worn out by irritation and pain.

10. That the chances of successful treatment, whether by the use of bougies or by the use of air or water, are exceedingly small, excepting in quite recent cases; and that if the surgeon does not succeed by them promptly it is not likely that he will succeed at all.

11. That the cases best suited for operation are those which have persisted for some con-

siderable time, and in which the intestine is only incarcerated, and that these cases are also precisely those least likely to be relieved by any other method.

12. That in the cases just referred to, after failure by injections, bougies, &c., an operation is to be strongly recommended.

13. That the records of post-mortems justify the belief that in a considerable portion of the cases referred to, the surgeon will encounter no material difficulty in effecting reduction after opening the abdomen.

14. That the circumstances which might cause difficulty are, first, the tightness of the impaction of the parts; secondly, the existence of adhesions; and thirdly, the presence of gangrene.

15. That in selecting cases suitable for operation the surgeon should be guided by the severity of the symptoms, in his estimate of the tightness of the strangulation, and also as to the probability of gangrene having set in.

16. That in cases in which the patients' symptoms are very severe, or the stage greatly advanced, it may be wiser to decline the operation, and trust to the use of opiates.

17. That the operation is best performed by incision in the median line below the umbilicus.

18. That in cases of intussusception in young infants (under one year of age), the prognosis is very desperate, scarcely any recovering excepting the few in whom injection treatment is immediately successful, whilst a large majority die very quickly.

19. That the fact just referred to may be held to justify, in the case of young infants, very early resort to operation.

20. That it is very desirable that all who in future have the opportunity for post-mortem examination of cases should give special attention to the question as to whether an operation would have been practicable, and should record their results.—*Braithwaite's Retrospect.*

A NEW METHOD OF CONTROLLING THE VELUM PALATI AND ENLARGING THE PHARYNGO-BUCCAL APERATURE IN RHINOSCOPIC EXPLORATION.

By Philip S. Wales, M.D.,
Medical Inspector U. S. Navy.

Under the above heading, an article appears in the *Medical Record*, November 27th. The author first describes the conformation of the fauces, and the difficulties in using the mirror owing to involuntary action of the muscles of the tongue and soft palate, the movements of the latter being most troublesome in rhinoscopy. He then describes the various devices of Czermak, Monsa, and others, mechanical and medicinal, and points out their inefficiency; the velum persistently rebels against being grasped and drawn forward, and the grasping instrument is an impediment. Automatic mechanical contrivances have proved insufficient [and temporary]; and medicines do not reach the case. The author then proceeds:—

"My principle consists essentially in overcoming the contraction of the palatal muscles, by elastic force, and the means of fully carrying it out will be found in an india-rubber cord. The simplest method of putting it in position after having selected one of such a diameter—two millimetres will do—as will readily pass through the inferior meatus into the pharynx without any instrumental assistance, is the following:

"One end is introduced into each nostril, until they both reach the lower portions of the pharynx. At this moment the patient is directed to cough, if the presence of the thread has not already excited this movement; the force of expiration will pretty surely project them into the mouth, when they may be apprehended with the fingers and drawn externally until the middle portion of the cord, which is external, is arrested against the nasal septum. Gentle traction is continued until the soft palate is well drawn forward, when the threads are passed up over the ears, and downwards beneath the chin and there tied, or they may be held by the patient himself. At any moment after the ends of the elastic are secured at the point indicated, the tension of the cord and correlative palatal pressure may be increased by seizing the threads as they pass out of the mouth and gently drawing them forward, until the palatal contraction is entirely overcome, and the area of the pharyngo-buccal space ample enough to receive the largest mirror. It will sometimes be observed that where there is very much irritability, the velum palati momentarily contracts, especially at the time when the mirror is introduced, but soon yields to the elastic force of the thread. Should any impediment whatever exist in the nostrils, that the cord cannot be passed by itself, an expert hand

may make use of any instrument that may chance around a catheter, slips of whalebone, or wood."

DEATHS FROM ADMINISTRATION OF CHLOROFORM AND ETHER.

Several of these unfortunate cases have been reported of late. In the *Medical Times and Gazette* of the 9th of October, we find an account of a case of dislocation of the shoulder reduced under chloroform at St. Thomas's Hospital, but which, on the patient's way home, again required reduction; this was again effected by two private practitioners with the use of the anæsthetic, but before the completion of the operation the patient had succumbed and all restorative measures proved futile. In the same journal, a week later, we find another case recorded in which a sailor, wounded in the Crimea, was about to have a piece of necrosed bone removed from the thigh, but expired immediately after the chloroform had been given. The autopsy revealed a diseased brain, but healthy heart. A death occurred at the Albany Hospital in November, under the use of equal parts of chloroform and ether. The patient being in ill health at the time, the surgeon desired to postpone the operation, but the patient would not consent. Death took place in three minutes after the inhalation of the mixture; and "the *post mortem*" showed dilatation of the right ventricle and hypertrophy of the left. There was also found thickening of the mitral valve and an enlarged and fatty liver.

Another case is reported at the Homœopathic College, New York, in which the inhalation of two and a half ounces of ether proved fatal. The brain, *post mortem*, was found to be congested, the heart small and fatty, the lungs, liver and kidneys engorged.

ON THE VALUE OF FLUCTUATION AS A SIGN.

BY T. H. BARTLEET, F.R.C.S., ETC.

Fluctuation in surgical affections is a symptom so common, and is in so many cases looked upon as pathognomonic of the presence of fluid, that I have thought it might be interesting to consider its true value.

I suppose it has occured to most surgeons to have passed a knife into a swelling, feeling assured that fluid would exude, but have felt surprise, perhaps chagrin, at the crucial test they had applied, forcing upon them the conviction of an erroneous diagnosis.

Now, there must be some peculiar or ill-understood or ill-recognized conditions which led many skilful and careful men into error, and which are constantly leading our students into similar mistakes.

I believe this false fluctuation to be generally due to the combination of two causes of error, one being muscular or glandular elasticity, and the other being muscular or glandular displacement.

I think any one who tries the experiment will be surprised at the sensation of fluctuation which can be obtained by pressing alternately, as in endeavouring to find the sense of elasticity or fluctuation of an abcess, a muscle across the direction of its fibres, say the biceps, or by similarly manipulating across the direction of the ducts, a firm and fairly large female mamma; either one of these two before mentioned causes alone might mislead; I mean either the displacement of the gland or muscle or the elasticity of the gland or muscle: but when you get combined the elasticity and the displacement, a suppositious fluctuation is felt so like to the real as to be almost if not quite undistinguishable from it. How, then, are we to be certain, especially in these positions, where either a gland or muscle is liable to mislead us, that the fluctuation we feel is really due to fluid? By a very simple plan, which I have never known to fail, and which is not clearly enunciated to my knowledge in any of our text-books, viz. by practising the manœuvre of palpation, not only across the line of the muscular fibres, or of the gland ducts, but also in a direction at right angles to this.

If the fluctuation be fluid it will be equally felt in all directions; if it be due to muscular and glandular elasticity or displacement, or both combined, it will be only felt in one direction, viz. across the muscular fibres or the gland ducts.

I would just sum up my conclusions,—that fluctuation of the most distinct kind may be caused either by the elasticity of muscular fibres or by the displacement of muscle: by the elasticity or displacement of glandular tissue; that this only occurs in one direction, viz. across the fibres of the muscle or the general direction of the gland ducts; that palpation at right angles to this will differentiate the false and the true fluctuation, inasmuch as false fluctuation is felt only in one direction, while true fluctuation is felt equally in all directions; but where different layers of muscles take different directions, care must be taken to palpate at right angles to each layer of muscles.—*British and Foreign Medico-Chirurgical Review.*

Ligature of a Main Artery to Arrest Inflammation.—Mr. C. F. Maunder, in one of his Lettsomian lectures on the surgery of the arteries, gives the following facts and conclusions regarding the ligature of a main artery, to arrest inflammation: "That ligature of the superficial femoral artery has arrested acute inflammation consequent on wound of the knee joint; that ligature of a main artery will quickly diminish profuse suppuration, and prevent death by exhaustion; that while it arrests profuse suppuration, it will, by allowing the patient to gain strength, afford an opportunity for amputation at a future time; that gangrene and secondary hæmmorrhage, as the result of ligature, should not be anticipated in the healthy subject; that the dread of these has arisen from our knowledge of the consequences of the ligature in instances of known diseased vessels—aneurism for example; that a slough on the heel caused by the pressure of a splint, was quickly detached, and the wound soon closed, although the superficial femoral had been tied a few days previously; that symptoms of inflamed bone, 'starting pains' quickly disappeared; that the arterial tension of the rest of the body will be increased beneficially by the ligature. Such, Mr. President, are the conclusions at which I have arrived from a review of the above subject; but, seeing that this operation was originated in America long before I was born, while I thought it had been first suggested by me in 1866, I may well say, 'there is nothing new under the sun.'"—*Lancet, July* 10, 1875.

Nævus.—*Electrolysis.*—For the treatment of nævus, by electrolysis, I use Stöhrer's and Meyer and Meltzer's continuous batteries, and judge according to the size of the nævus how many cells to use—six or eight is about the average if the battery is in good working order. If the nævus is small I use one or two needles attached to the negative pole, and one to the positive, and pass them into the tumour; but if large, I put on several needles in the negative cord, and use charcoal point with the positive. After the needles have been in the tumour a short time decomposition begins to take place; this is shown by bubbles of gas passing by the side of the needles. A clot is then formed, the tumour turns of a bluish white, and in this clot fibrous degeneration takes place, and ultimate cure is the result. The advantages of the galvanism are its certainty of action, its safety, the faintness of the cicatrix, and the cessation of pain directly the operation is over. I have used every other method, and I certainly think this by far the best. *(Mr. S. J. Knott.)—Braithwaite.*

Fracture of the Patella.—Place a piece of good adhesive plaster on the front of the leg, its upper edge being cut in a crescentic shape to fit round the lower edge of the fractured patella, and to each of the corners of the crescent attach a small loop. Do the same with the lower part of the thigh, making the crescent to fit the upper edge of the patella when the fractured parts are approximated, and attach the loops as before. Carefully bandage both leg and thigh nearly up to the free edge of the plaster. Swing the leg in a "Neville's Splint" (an ordinary cradle splint will do). The bandage should include the splint. A piece of cord is to be attached at each side to the loops connected with the plaster below the patella, then passed through the loops of the cornua of the upper plaster, and thence carried over two pulleys clear of the bottom of the bed. The two cords are to be united below this and a

weight attached. It will be seen that the weight makes traction upon both plasters, drawing them together and approximating the fractured pieces of bone. *(Mr. G. W. Callender.)—Braithwaite.*

Use of Malgaigne's Hooks without penetrating the Skin.—Malgaigne's hooks have never been much used for fracture of the patella, although perfect as a mechanical contrivance for maintaining the fragments in accurate apposition. By protecting the skin well with several layers of moleskin plaster—the fragments of patella being held in close apposition at the same time—the hooks may be applied with perfect success, yet without their points penetrating the skin. *(Prof. Spence)—Braithwaite.*

Opthalmology.

CONIUM: AND ITS USE IN DISEASES OF THE EYE.

BY EDWARD CURTIS, A.M., M.D.

Professor of Materia Medica and Therapeutics, College of Physicians and Surgeons, New York; Surgeon to the New York Eye and Ear Infirmary.

The writer holds that all evidence *pro* or *con.* concerning hemlock and its true status as a medicine is worthless, unless the individual preparation used in each case shall have been shown by physiological testing to possess full activity. Many preparations are almost if not entirely inert, and even the one good form—the new fluid extract of the green fruit—is sometimes quite unreliable.

Practically, conium operates as a pure motor paralyzer, and the obvious use of the drug is to neutralize spasm, or enforce muscular rest by establishing a temporary degree of paresis. Hence its value in relieving the distressing "blepharospasm" that accompanies many acute inflammations of the cornea, conjunctiva, and sometimes the iris, and which, though itself a mere consequence of the inflammation, reacts on the main disease, aggravating its intensity and prolonging its duration. And the effects of the hemlock are increased by the fact that the ocular muscles, which are also involved in the disorder, are specially subject to its physiological influence.

Harley pointed out this application of conium, and in his book on the "Old Vegetable Neurotics," records a very considerable success with it in the blepharospasm depending on ophthalmic inflammations. The writer first tested this remedy in a case of inflammation of the cornea and iris, with excessive intolerance of light, constant severe pain, and marked spasm of the lids. The patient was at first treated in the customary way by local instillations of a strong atropia solution, warm applications, rest in bed in a dark chamber, including appropriate general measures and hypodermics of morphine to relieve, if possible, the pain, and procure sleep. But five days of this treatment resulted in no benefit whatever. The patient, æt 23, was then ordered one or two full doses daily of Squibb's fluid extract of conium fruit. The first dose, of forty minims, broke the spasm in half an hour, and the patient was enabled to open his eyes for the first time in twelve days. The Extract was repeatedly given with prompt and marked relief of the subjective symptoms, and an improved condition of the eye under the original line of treatment.

In the case of a girl, nine years old, with granular lids and ulcerated cornea, accompanied by intense blepharospasm and photophobia, Dr. O. D. Pomeroy gave her ten drops of Squibb's extract. In twenty-five minutes the child could partially open the eyes, and after the lapse of forty, opened them fully and naturally, and faced the light without flinching. And what is exceedingly interesting, there is reported to have been no return of the spasm from that moment, though but the single small dose was given.

In a case of severe and persistent blepharospasm, accompanying granular lids and pannus, under the care of Dr. Loring, which for two weeks had resisted all other treatment, two twenty-minim doses were given, and an hour after taking the second the eyes were voluntarily opened, and the pain greatly abated. The next day almost entire relief of the nervous symptoms followed a forty-minim dose, and for five days more similar daily doses were given, during which the acute symptoms of the disease steadily receded. The drug was then no longer

urgently called for, and was discontinued, as it produced in this case distressing giddiness.

In another case of intense spasm of the orbicularis, due to acute granular conjunctivitis and pannus, the hemlock gave only very moderate relief from the spasm and pain.

The writer thinks that while conium may practically fail entirely, as in the last case, still its success in others warrants an extended and impartial trial of the drug in the very common and distressing condition under consideration; and to test its efficiency, it must be given so as to produce some degree of its peculiar physiological effects.—*N. Y. Medical Record.*

Midwifery and Diseases of Women.

FORDYCE BARKER ON THE TREATMENT OF MASTITIS AND MAMMARY ABSCESS.

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First, then, in regard to the subcutaneous form, it is to be treated exactly as you would treat phlegmonous inflammation in other parts. You must, however, remember that inflammation is usually (not always) of an asthenic character, and, consequently, antiphlogistic means of an active character are not admissible. I trust all of you have read or will read Paget's "Lectures on Inflammation," and, if so, you will see how improper, oftentimes, antiphlogistics are in suppurative inflammation. Well, then, if there be strong febrile re-action and a high degree of vascular excitement, you will give a diaphoretic sedative, such as aconite. To allay pain and procure sleep, at night, give eight or ten grains of Tully's powder or of Dover's powder. Sometimes, you will find it well to add to the powder a couple of grains of calomel, and to give the next morning a Seidlitz powder or a bottle of the solution of citrate of magnesia. When there is an epidemic or endemic tendency to this form of suppurative inflammation, you will avoid such agents as the aconite and others which depress the system, but, instead, give your patients quinine, in as full doses as the system will tolerate. By the use of this, you will often prevent suppuration, as I have frequently demonstrated, both in the hospital and in private practice. As for the local treatment, an abscess may frequently be aborted, if you see the case sufficiently early, by freely painting over the inflamed surface with iodine, just as you may abort a boil or carbuncle. But, in order that this treatment should prove successful, I think the application should be made within twenty-four hours of the commencement of inflammatory process. As in other phlegmonous inflammations, warmth and moisture are of the greatest service in relaxing the tension, favoring the effusion, and thus relieving the over-distended vessels. You apply this by means of either a bread-and-milk or linseed-meal poultice, as hot as it can be borne, or, which I generally prefer, by water-dressings, that is, two folds of lint soaked in warm water, and covered over with oiled silk, which should extend all around, much beyond the lint. In this form of mastitis, as also in the subglandular form, rubbing the breasts, which, with some, seems to be a routine practice, is absolutely pernicious. A moment's reflection will convince you that it must be so; and yet I have been often surprised to see how carelessly it is prescribed. So, also, in these cases, the application of belladonna is entirely useless, except as it relieves pain. As soon as the abscess points, and the fluctuation can be detected, it should be opened in the most dependent point, but carefully avoiding the areola, as, if it be opened here, the cicatrix may produce retraction of the nipple, and thus prevent the use of the breast after subsequent labors. If my patients have a great horror of the lancet, while I tell them that they will probably be saved two or three days' suffering, and the cure will be effected two or three days sooner, by opening the abscess, I do not insist upon it in the subcutaneous variety, as I do in the glandular and subglandular; for, in the latter, serious consequences may result from a neglect to do so. The poultices should be continued until the abscess is emptied. But be careful not to apply them too long. The breast should always be well supported. If the induration remain after the abscess is healed, compression, either by adhesive plaster or by the compressed sponge, should then be

applied. I shall discuss this point fully in connection with the other forms of abscess.

In the treatment of the subglandular form of mastitis, the same general principles should govern us, as to constitutional measures, as in the subcutaneous variety. Either sedatives, anodynes, laxatives, or tonics, like quinine, may be indicated, and the indications are too plain to be mistaken by any but the merest routinist. But little can be anticipated from any topical treatment. Rubbing the breasts, for reasons already given, will be worse than useless. The application of the extract of belladonna will do little to mitigate the pain, and nothing to prevent the formation of pus, while its offensive odor is a strong objection against its use, unless we are certain to do good by it. Furthermore, if, as is now generally supposed, it has a direct influence in arresting the lacteal secretion, it may do positive harm, because otherwise this function might be preserved. So, too, compression by any means is not to be thought of, and for the following reason : The purulent accumulation is between the breast and the chest, and it seeks an exit at the surface. The most favorable point for this is at the inferior circumference of the gland. But, if compression be used, it may result in the formation of several sinuses at the circumference, or the ulcerative process may be developed in the areolar tissue, between the lobules of the gland, and subcutaneous abscess may appear as secondary to the subglandular. Indeed, several subcutaneous abscesses may result from one purulent cavity between the gland and the chest. While these occasionally are spontaneous results, it is certain that compression, especially if it be effected by the compressed sponge, as recommended by Dr. Foster, must favor such results, as, in the latter case, we have compression and a poultice combined. Poultices in this form of mastitis can have no influence in promoting resolution or advancing suppuration. Their sole effect must be to soften the tegumentary covering, and they may, for this reason, cause the pus to come to the surface at one or more unfavorable points. So I never use them in these cases. The sole remedial measure of value is, to secure the early discharge of the pus by incision. If the conditions of the case will admit of an election, the opening should be made at some inferior point in the circumference of the breast, so as to prevent secondary inflammation of the glandular structure or of the subcutaneous areolar structure. Sometimes, where the signs of subglandular abscess existed, but no fluctuation could be detected, I have cleared up all doubts, by lifting up the gland from the thorax, and passing between them an exploring needle. If pus were found in the canula, I have then made a sufficiently large incision with a long tenotomy-knife, and these cases have been rapidly cured. But if the abscess point on the anterior surface, then the opening must be made where the fluctuation exists, and care must be taken to prevent its closure before the pus is all discharged, by the insertion of a tent. After a few days, compression should be used, leaving the sinus open, for the purpose of completely evacuating the purulent cavity, and promoting adhesion of its walls.

Glandular inflammation, or mammary adenitis, if you prefer to use the less simple term, presents two types. In the one, the different stages of the inflammatory process succeed each other with great rapidity. If resolution be not obtained, suppuration and cicatrization require but a comparatively short time. Thus, among the cases of Velpeau, you will find one, in which several lobules were involved, terminating in abscess, but completely cured in nineteen days. Another case of multiple lobular abscess was entirely well in a month. All practitioners of any experience have met with such, and these are undoubtedly the cases which have led some writers for medical journals to believe that some special treatment peculiar to themselves is a great advance upon every thing before known. But in the other type, the different phenomena of inflammation are slowly developed, and the corresponding symptoms are much less intense; and you see, therefore, cases reported by Dr. Foster, Dr. Johnson, Velpeau, and many others, running on for two, three, or four months, and sometimes for six or eight months. The first class generally occurs in those of vigorous constitution, active circulation, cheerful temperament, and happy nervous organization. The second

is most frequently met with in those of a lymphatic temperament, an irritable nervous system, low vital powers, and a despondent *morale*.

In the first class you will readily see that vascular sedatives, saline laxatives, anodynes, and an antiphlogistic regimen, will be required, while in the other class, as nutritious a diet as the stomach will take care of, stimulants, such as ale, wine, or brandy, tonics such as quinine and iron, and opiates, will be indicated. I take it that it is unnecessary for me to say more than this in regard to the constitutional treatment. The local measures demand a much more extended discussion. First, then, primitive glandular inflammation is almost invariably preceded or accompanied by obstruction of the lacteal ducts, or lacteal engorgement, as it is termed. Inflammation seems for a time to increase the functional activity of the organ, in some cases, while, on the other hand, lactation aggravates the inflammation, and increases the tendency to the formation of pus. Nursing, therefore, should be forbidden, as the pain and excitement produced by the infant at the breast must act unfavorably upon the inflammatory process; but if the lacteal secretion appear to continue with activity, the breast must be disgorged by artificial means. This can be best effected by rubbing the breast gently but perseveringly, from the circumference to the nipple, the hand being lubricated with sweet-oil. The rubbing should be continued until the breast is soft, and all nodulated indurations have disappeared, and for one or two days this process should be frequently repeated. This is a method which has long been adopted in the Dublin Lying-in Hospital, and is warmly recommended both by Dr. Foster and Dr. Thomas; and, from a large experience, I am able to fully indorse all that they have said in regard to its value. Then, the next question is, as to the best means of preventing the return of the lacteal engorgement. Camphor is generally believed to exert a specific influence in diminishing the lacteal secretion; and some have therefore recommended the camphor-liniment, others, a saturated solution of camphor in glycerine, to be used instead of olive-oil.

I prefer the olive-oil for rubbing the breast; and then cover it with the extract of belladonna, softened with a little glycerine. Sometimes I direct that the breast be kept covered with a cloth on which the extract of belladonna has been spread, leaving a hole for the nipple. Belladonna not only relieves the pain resulting from the tension of the tissues, but, from its power of relaxing muscular fibre, it seems to allow a more free exit of the milk, by dilating the lactiferous tubes; and, within a few years past, it has been believed to possess the property of arresting the lacteal secretion. But of this I am certain; that it is a most valuable application to the breast, in glandular mastitis, and I have used it for this purpose (and have also applied it to the leg in phlegmasia dolens), for more than twenty years. I received this hint from Dewees, who professes to have obtained it from Ranque. If these means do not secure resolution, it only remains to open the abscess when suppuration has taken place. The opening should be large enough to allow all of the pus to freely and easily escape.

The next remedial measure, having for its object the relief of engorgement of other lobules, the removal of induration, the prevention of purulent infiltration into the adjacent areolar tissue, and the formation of obstinate fistulous sinuses, is compression. This should be applied so as to support the breast and firmly compress it, from the circumference to the centre, without closing the aperture for the escape of pus; and it is usually best effected by means of adhesive plaster. There are several modes of applying adhesive strips, described by different authors, either of which may be preferable to all others in certain cases. I shall not stop to describe each of these methods, as none of them are adapted to all cases, and some are open to this objection, that they seriously interfere with respiration. It is impossible to lay down a definite rule for the application of the adhesive strips, because the breast differs so much in different women, in size, shape, form, and position of attachment on the chest. I shall only give you this general rule—apply the straps so as not to impede respiration, but in a way to support the breast, and firmly and equally compress all its parts from the circumference to the nipple, leaving the latter free,

and also an opening for the escape of the pus, where the discharge has taken place. Your success in securing these results will depend upon individual tact, and, if you have not that, no rules will supply its place.

With regard to compressed sponge as a means of compression, I shall only say that I have seen it of great service where warmth, pressure, and moisture are all required, to promote resolution of glandular inflammation. But it strikes me as liable to objections in open abscess.

Before closing my remarks on abscess of the breast, I must not neglect to mention that purulent deposits not unfrequently take place in the breast, as a result of pyæmia, septicæmia, or puerperal fever, and this is to be regarded as rather a favorable symptom, as I shall explain when discussing these diseases.—*Barker on Puerperal Diseases.*

On the Local Use of Liquid Ferri Perchloridi in Cancerous Ulceration of the Uterus.—*By* Dr. C. J. Gibb, *of Newcastle-on-Tyne.*—After a few remarks on the unsatisfactory results of treatment in cancerous diseases of the uterus, Dr. Gibb states that he was induced to employ the Solution of the Perchloride of Iron in such cases, from observing its beneficial action in an obstinate case of menorrhagia, arising from enlarged vascular granulation in the uterine cavity. He gives the history of four cases in which the application of the solution was more or less useful, but he draws a distinction, as to the chances of success, between the cases where the cancer is hard and embraces the whole of the uterus, and those where the disease is epitheliomatous, spreading over the vagina and throwing out toward the surface exuberant vascular fungoid granulations. In the latter, Dr. Gibb thinks that the application of cotton-wool soaked in the solution of iron clears away the greater part of the diseased growth, allows reparative efforts to be made by the comparatively healthy structures underneath and hastens cicatrization. When the disease is purely epithelial, and chronic, and rodent in character, and confined to the surface, the treatment described has done most good, and appears to Dr. Gibb to cure even bad cases. The application rarely causes pain, except where the solution has accidentally flowed over adjacent parts, which have been thereby blistered and painfully excoriated. He therefore takes care to limit the application to the diseased part alone. He has always used the strongest pharmacopœial solution undiluted, as he wishes to secure a caustic action. At first he applied it on a piece of sponge or lint, but finally he found cotton-wool to answer best, as this sucks up any quantity that may be required, parts with it easily, and can be moulded into any form, so as to fill a cavity, or cover over and adhere to any growth. He lastly fills the vagina with a plug of tow, and dries and oils the vulva before the patient rises from the couch.—*British and Foreign Medico Chir. Review.*

Hydrocele in a Female.—Dr. G. A. Baxter (*Southern Medical Record*, Feb., 1875,) narrates the case of a woman, aged thirty-two, who two years previously, while lifting a heavy bucket of coal, felt a sharp pain in the inguinal region, which passed away in a few minutes. Some days after she experienced pain in the same region, extending into the labia majora, and accompanied by swelling. These symptoms continued, when, on lying down, one day, the swelling and pain suddenly and almost entirely disappeared. The tumour remained in this state for nearly two years, when, having fallen over a chair, the labia majora became bruised, and the tumour began to increase, without giving pain. Dr. Baxter found a tumour as large as an ordinary egg, whose apex pointed to the external inguinal ring, and whose base was large, and caused bulging of the upper portion of the labia majora. The swelling was first taken to be a hernia or an abscess, and under the latter supposition it was opened, when serum instead of pus was evacuated. She rapidly recovered.—*Brit. and For. Medico Chir. Review.*

Pruritus Vaginæ.—The author says a dilute solution of tincture of iron has been found an exceedingly effective remedy for this troublesome disease. It has been equally successful in his hands in cases of pruritus ani.

In such cases he endeavours to ascertain if the patients are addicted to opium or chloral, as he has found pruritus caused by this class of medicines when habitually taken. The treatment is then of course obvious. In treating pruritus he does not neglect to give aperients, and he thinks the most suitable is an occasional saline in the morning; a Seidlitz will do very well if taken before breakfast. (*Dr. Blair.*)—*Lancet.*

DISTENSION OF THE URINARY BLADDER MISTAKEN FOR AN OVARIAN CYST.

One of the most mortifying mistakes in diagnosis that can be made, and yet one that is by no means infrequent, is that in which an abnormally distended bladder is thought to be an abdominal tumour of importance. Misled by the occurrence of apparently free discharge of urine, the clinical observer has been known to diagnose a pregnant uterus when there was only hysterical retention of urine, and when the timely use of the catheter has caused the disappearance of the tumour and pregnancy at once. Dr. Murchison records a remarkable case of enlargement of the abdomen in an elderly male, which was justifiably believed to be hydatid tumour of the liver, but which, on tapping, yielded twenty-four pints of urine. Another case has been recorded in *Le Progrès Médical*, May 15th), which is highly instructive. The patient was a female, thirty-two years of age, in whom menstruation had ceased for three months previous to her admission into Lariboisière Hospital, under M. Jaccoud; but there were no definite signs of pregnancy. Ten days before admission she experienced pain in the abdomen, which rapidly began to enlarge, and was soon followed by œdema of the lower extremities and genitals. There was a tumour in the median line, occupying the hypogastric and umbilical regions, reaching to four finger-breadths above the umbilicus, descending below into the pelvis. The cervix uteri was out of reach when vaginal examination was performed; and at first the opinion was that the tumour was ovarian, which was replaced by the hypothesis that it was a distended bladder, from its rapid growth, the pain at its onset, and the difficulty experienced in micturition. Catheterism yielded about a pint and a half of urine, and the bladder was thought to be completely evacuated. M. Jaccoud deferring a complete examination until the next day, the patient was seized in the night with dyspnœa, to relieve which the tumour was aspirated, and nearly eight pints of urine were drawn off, the last being blood-tinged. Before the operation the catheter had been employed, so as to be sure that the bladder was empty. Death occured in six hours, the *post-mortem* examination showing a uterus between the third and fourth months of pregnancy, and great dilatation of the bladder and ureters. The seat of puncture was sought for in the walls of the bladder without success. No mention is made of the reason why catheterism failed to draw off all the urine.—*Lancet*, Oct. 9, 1875.

Materia Medica.

Sulphate of Cinchonidia.

Sulphate of Cinchonidia, according to the report of the Surgeon-Major Geo. Yates Hunter, of Bombay, who was appointed by the Government to test its value, cannot, either in an economic or therapeutic point of view, be substituted for Quinine. Although efficient in mild cases of malarious fever, it required to be given in much larger doses, and for a longer time than quinine; and caused in nearly every case severe headache, and sickness at stomach. The experiment extended over a period of six months, fifty-five cases of fever, chiefly intermittent of a mild form, being treated in the Bombay Hospitals, the medicine being administered both by the stomach and hypodermically.—*Druggists' Circular.*

External Use of Perchloride of Iron, in Erysipelas.

Dr. Clarence Foster, in the *London Medical Times and Gazette*, strongly recommends the external use of the Tincture of Perchloride of Iron in simple cutaneous Erysipelas, and in the milder phegmonous variety. He also uses it in preference of Iodine in scrofulous swellings of

the neck, threatened mammary abscess, and applies it to the joints in acute articular rheumatism.—*Druggists' Circular.*

Removal of Syphilitic Stains.

M. Langlebert removes pigmentary spots, the the result of syphilitic eruptions, by blisters kept suppurating for a few days.

Nitrite of Amyl for Sea-Sickness.

Dr. Crochley, Clapham, having treated one hundred and twenty-four cases of sea-sickness with Nitrite of Amyl, reports one hundred and twenty-one cases eminently satisfactory, there being no return of the malady. The remaining three cases required a further dose or two of the remedy. He exhibits the drug by inhalation, three drops of the nitrite being poured on a handkerchief and rapidly inhaled. —*Phila. Med. Times, from Lancet.*

Phosphide of Zinc.

Phosphide of Zinc, in one-third of a grain doses, frequently repeated, has been found extremely useful in certain skin diseases, and especially in herpes zoster, also in psoriasis, eczema, acne indurata, lepra, and scrofulo derma; its powers are said to be superior to those of arsenic in the rapidity with which they are evinced.—*Dr. J. Ashburton Thompson, in the Glasgow Medical Journal.*

Jaborandi.

This is supposed to be the Pilocarpus pinnatifolius, N. O. Rutaceæ. The leaflets are the parts used. Dose for an adult: sixty to ninety grains infused in boiling water. Therapeutically it possesses powerful diaphoretic and sialogogue properties. It also increases the secretion of the bronchial mucous membrane, and of the mammary gland. It is said, in its action, to be antagonistic to belladonna, and in a case that occurred in University College Hospital was administered, with a successful result, to a boy who had taken one grain of atropia.

Boracic Acid in Ringworm.

Aqueous solution of Boracic acid, a drachm to the ounce, is said by Surgeon-Major Watson to be a simple and efficient cure for ringworm. The parts are well bathed with the wash twice a day.

Muriate of Ammonia in Bronchitis, Catarrhal Pneumonia, etc.

By H. C. Wood, *Jun.*, *M.D.*, *Philadelphia.*

In obstinate acute bronchitis, after the first intense stage; in catarrhal pneumonia, both of children and adults; in bronchorrhœa, and also in ordinary chronic bronchitis, Dr. Wood has obtained more apparent good from the use of muriate of ammonia than any other remedy. The best formula for giving the muriate with which he is acquainted is as follows: R Ammoniæ muriat. ʒij; ext. glycyrrhiz. ʒj; mucil. acaciæ, aquæ, āā fʒiij. M. S. Tablespoonful for an adult every two hours; teaspoonful for a child a year old every three hours.

When patients object to the mixture of sweet and salt, the following is to be preferred: R Ammoniæ muriat. ʒij; aquæ, fʒvj. Dose as before.

When the cough is very annoying $\frac{1}{20}$ of a grain of sulphate of morphia, or, 10 to 15 minims of tincture of hyoscyamus, may be added to each dose.

In bronchorrhœa the following may at the same time be used by inhalation twice or thrice daily. Take of Sat. solution of alum, ʒvj; tr. hyoscyamus, ʒss. M.—*Half-Yearly Abstract.*

A Remedy for Catarrh.

Dr. E. Brand speaks in terms of recommendation of the following formula for an anticatarrhal olfactory, prescribed by Dr. Hagner; R Carbolic acid, 5 parts; rectified spirits of wine, 15 parts; strong solution of ammonia, 5 parts; distilled water, 10 parts. The mixture is kept in a stoppered dark glass bottle. When a catarrh is commencing a few drops are placed on three or four layers of blotting or filtering paper; the patient, holding this in his hand and closing his eyes, inhales deeply from it as long as any smell is preceptible. The effect of the treatment is to cut short the acute stage of the cold, to prevent the occurrence of subsequent coryza and bronchial and laryngeal catarrh, while all troublesome symptoms are rendered much milder. The remedy should be applied every two hours.—*Half-Yearly Abstract.*

Treatment of Whooping Cough. — The following mixture is recommended. R chloroform, 30 grammes; ætheris, 60 grammes; ol terebinth rect., 10 grammes. This mixture should be kept constantly at hand, and a teaspoonful administered by inhalation during the paroxysm. If properly conducted, this treatment is said to cure the disease.

THE CANADIAN

Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, JANUARY 1, 1876.

THE CANADIAN JOURNAL OF MEDICAL SCIENCE.

AFTER much solicitation and many promises of support, we send our bantling to the world, to live or die on its own merits. It has been often urged upon us that another good medical journal was needed in the country, and that we could command the material to supply the want. We believe we have made such arrangements as will enable us to produce a journal of some value to the Canadian practitioner, who, amid the anxieties and fatigues of his endless toil, has little time to wade through large folios for those hints which even the most intelligent feel the need of, and which are absolutely necessary to every man who wishes to keep abreast of the times.

Few modern practitioners will be content to draw their only inspiration from the times of Sydenham or Mason Good; and for men in active general practice, either in town or country, to attempt to sift all the chaff of the current literature to secure the kernel they require, is an absolute impossibility.

Foreign medical literature has taken so prominent a position of late, that we are pleased to announce that, having secured an able staff of assistants and translators, we shall be able to supply our readers with an epitome of much that is useful and practical in British and foreign works and periodicals as they issue from the press.

We shall try, as far as our judgment enables us, to make such selections as will be of most use to the busy practitioner; such as will assist in solving some of the doubts which beset every conscientious man occasionally, at the bedside of suffering humanity.

We have made arrangements to give regular hospital reports when they have some practical value; and while we hope to receive a share of original communications so freely contributed by the profession, we wish it to be distinctly understood that we reserve in *all cases* the right to decline, insert, or epitomize, in such manner as we in our *supreme* judgment may consider best. Our columns will be open for the discussion of all matters pertaining to the general profession, but we cannot undertake to redress personal grievances, nor will we open our pages to personal controversy.

We will endeavor, as far as possible, to consolidate the Canadian medical profession, and to promote the efficient working of the Ontario Medical Act, and we shall insist on the Act being carried out in its integrity, without favor or affection. We are decidedly opposed to the admission of any persons (coming from whence they may) to the privileges of the profession in Ontario without fulfilling all the requirements of the Act. We know too well how degrees are sometimes obtained in other countries. While Canadians must pay tribute to Cæsar, Cæsar must pay tribute to Ontario.

We can offer our friends no better earnest of our good intentions than will be shown month by month in the character of the articles selected for our columns. None but those who have been connected with a journal can judge of the difficulty of the labor, and of the expense attending the initiation of such a work. Neither as regards labor is it a sinecure, nor as to "filthy lucre" is it profitable; but if we can succeed in the idea which has been our sole *raison d'etre*, that is, to assist in elevating the standard of medical journalism in Canada, we shall feel that our labor has not been altogether in vain. Let our friends, if we succeed in pleasing and profiting them, tell us so in the most emphatic manner, by forwarding in advance our moderate subscription.

UPWARDS of 1754, gentlemen pursuing their professional studies at the eleven metropolitan hospitals, have registered their names at the College of Surgeons, London, England.

It is with feelings of pride we record the fact that the medical profession in Ontario is represented in the Local Legislature by no less than twelve gentlemen, this too in a house of 88 members. With such a representation there can be little doubt but the interests of the profession will be well looked after. We question if the profession in any country can boast of such a proportionate representation. The following are the names of the members in the house. Drs. John Barr, Jacob Baxter, G. H. Boulter, John Clarke, M. F. Haney, W. Harkin, James McMahon, W. Mostyn, John O'Sullivan, R. H. Preston, J. H. Wilson, J. H. Widdifield. The latter gentleman had the honour of proposing the adoption of the Address. While we are quite aware that these gentlemen will not be likely to take up as much of the time of the House and country in talking as some of the more loquacious members of a sister profession, still we maintain that from the practical knowledge possessed by many of them of municipal and school matters, they will be of the utmost service to the country. We notice, too, that the Government promises to amend the present farcical law with regard to the registration of vital statistics. We look to the medical men in the House to see that some practical legislation is carried out with regard to this matter.

Dr. Fleetwood Churchill, of Dublin, the author of the well-known work on obstetrics, has retired from active practice. Dr. Churchill's retirement was graced by a generous gift to the King's and Queen's College of Physicians, on his own part and that of his son, Dr. Fleetwood Churchill, jun., of the valuable obstetrical library he had collected during his lifetime.

By the death of John Hughes Bennett, M.D., late Professor of the Institutes of Medicine in the University of Edinburgh, the profession has been deprived of one of its most eminent members. He died at Norwich, at the age of 63, in ten days after undergoing the operation of lithotomy. A *post-mortem* examination revealed a tumour about the size of a hen's egg in the right side of the brain between the dura mater and the bone. The brain weighed forty-seven ounces. Dr. Bennett had never suffered from any symptons indicative of brain-lesion. The deaths of Sir Charles Locock, Bart., M.D., D.C.L., F.R.S., physician accoucheur to the Queen, and Dr. Duchenne de Boulogne, will make the last half year memorable in the annals of the profession for the losses therein sustained.

Dr. Greenlees has returned to the city and resumed his practice, after spending two months in Mississippi, for the benefit of his health. All his friends are glad to see him back so much benefited by his trip.

Hospital Reports and Cases in Practice.

TORONTO GENERAL HOSPITAL REPORTS.

TRICUSPID REGURGITANT MURMUR WITH CARDIAC DROPSY.

Case I.—Alfred Young, æt. 19, admitted Feb. 15, 1875. Patient enjoyed moderately good health until about a year ago, when he had a severe attack of ague, which lasted four months, and since then he has been poorly, but able to do light work. Last November he was crushed between two waggons, and he says he has suffered from slight pains in the chest since that time, although no severe injury could be detected. During the early part of this winter he was insufficiently clad, and frequently slept in sheds and exposed places. He complains of pain in the head, loss of appetite, and pain in the chest. He is of a pale, sallow countenance, and is very weak. His legs and feet are slightly œdematous.

On physical examination of the chest the following signs were discovered :—The area of cardiac impulse was much increased, as well as the area of cardiac dulness.

On auscultation, a systolic bruit was heard with greatest intensity over the sternum, opposite the third interspace. It diminished in intensity as the stethoscope was passed towards the apex, and to the left of it, and was not heard over the large vessels. Pulsations could be seen distinctly in the large veins of the neck. The spleen was found to be enlarged.

June 3rd, 1875.—Patient has been confined to bed since admission. The general anasarca has increased so that his limbs and abdomen are very much swollen. Urine contains no albumen.

June 22nd.—Patient, who has been rapidly growing weaker, died this morning.

Post mortem 24 hours after death.—The following conditions were found:—A large quantity of fluid in the abdomen; pigmentary degeneration of liver; spleen measuring 10 inches by 7½, not weighed.

The right side of the heart was dilated. There was a malformation of the tricuspid valve, which was made up of only two segments, and one of these seemed to a certain extent adherent to the side of the ventricle.

The peculiarity in the diagnosis of this case was that the murmur was heard in its greatest intensity nearer the base of the heart than is generally the case.

Case II.—Irena Churchill (colored), æt. 59; admitted June 24th, 1875. Patient says that she had been as well as usual up to three months ago, when she felt dull pains in the lumbar region. Her appetite is poor, bowels constipated, and she complains very much of cold feet. She says that she vomited during the first part of her illness, but not since. She suffers from shooting pains in the abdomen, extending down into the thighs.

Physical examination.—A hard tumour of even surface and oval shape is felt in the epigastrium. It rises and falls with every pulsation of the abdominal aorta and appears to be expansive. The abdomen is enlarged, and dulness is marked over the tumour. A prolonged bruit is heard over the seat of the tumour, and also over the spine, at the junction of the dorsal with the lumbar regions.

August 10th—Patient, who has gradually become weaker, died to-day.

Post-mortem 24 hours after death.—On opening the abdomen a large oval tumour of a smooth surface was found connected with the cardiac extremity of the stomach, but originating behind it. On being cut into it was found to be hard, most probably scirrhus. It rested on the abdominal aorta, and was bound down to the spine for two or three inches. This circumstance accounted for the prolonged bruit heard over the vertebral column.

Remark.—In this case it was exceedingly difficult to diagnose between aneurism and malignant tumour, as almost every sign of aneurismal tumour was present.

During the last year three cases of tinea favosa have presented themselves. In all the cases the disease had been of several years standing, so that the hair on and around the vertex had been destroyed, leaving the upper part of the head quite bald. That portion of the scalp on which the hair still existed was covered with yellow crusts, having the peculiar odour of mice.

The mode of treatment adopted was to remove the crusts with olive oil, to pull out all the diseased hairs, and to apply a wash of carbolic acid ʒi, alcohol and glycerine each ʒi and water ʒvi. Citrine ointment was used sometimes instead of the wash. In one of the cases the disease appeared to have been entirely eradicated, as it is some months now since he left the hospital, and the disease has not returned.

In the second case a few of the diseased hairs still remained when he left, from which the growth spread and the disease became as bad as ever. The third patient is still in the Hospital.

FOUR CASES OF INTUSSUSCEPTION.—NOVEL AND SUCCESSFUL TREATMENT IN TWO.

Extracts from the Case Book of Dr. James Ross, *of Toronto.*

The first case occurred in February, 1864, in a child aged five months, and proved fatal in forty-eight hours. The usual characteristic symptoms were present—vomiting continued and uncontrollable, great tenesmus, with passage of blood and mucus, constipation, tympanites, with great abdominal tenderness, anxious countenance, and symptoms of severe pain, constant desire to stool. A large roll of intestine could be felt in the left side of the abdomen, extending from the ilium to the umbilical region. In spite of all treatment the symptoms increased in severity, and death occurred in

forty-eight hours. The treatment adopted was warm applications to the abdomen, opiates, and copious injections of warm water, as much force as was deemed safe being used in order to, if possible, reduce the invagination. A post mortem examination showed that the transverse and ascending colon, the cæcum, appendix cæci, and three or four inches of the ileum were so firmly invaginated in the descending colon and rectum, that great force was necessary to dislodge the incarcerated portion.

The second case occurred in April, 1864. The patient was a child eight years old. The symptoms were equally well marked as in the previous case, death taking place on the sixth day in spite of all the usual remedies being repeatedly administered. This case was seen in consultation by Dr. James A. Richardson, of Toronto. The long tube could be passed to a distance of eighteen inches, but water injected was returned immediately. Post mortem examination showed three invaginations in the small intestine, two being situated in the ileum, eighteen inches apart. The third was in the lower part of the jejunum. There was also a constriction of the colon, about ten inches in length, the intestine above it being greatly distended with fæces. But slight evidences of peritonitis were present.

In the third and fourth cases Dr. Ross adopted an ingenious and novel mode of treatment with most satisfactory results.

The third patient was a child aged eighteen months, first seen on May 6th, 1864. On May 4th the child was attacked suddenly with vomiting and tenesmus, having been slightly troubled with diarrhœa for a week previous. The tenesmus was severe and followed by a discharge of blood. The bowels had not been moved since the morning of the 4th. The invaginated portion could be felt immediately within the anus, and a distinct roll could be felt along the course of the sigmoid flexure; this was very tender under pressure. Vomiting, tenesmus and prostration, with an anxious countenance, were the prominent symptoms, the child evidently suffering great pain. Dr. H. H. Wright was called in consultation, and an unsuccessful attempt made to reduce the invagination by copious injection through a long tube. An opiate was prescribed, which gave some relief during the night, but all the symptoms returned in the morning. In the afternoon, the patient becoming evidently worse, Dr. Ross determined on a novel expedient. The patient was inverted by an assistant, and five ounces of metallic mercury were injected into the rectum, the assistant being directed to shake the patient up and down for about ten minutes, then to incline her buttocks to the right, gradually bringing the body to the horizontal position upon her right side, then turning her upon her face, keeping up the shaking motion. This had probably occupied twenty minutes, when the child's countenance manifested relief, the anxious expression disappeared, and the child for the first time smiled. The patient was now gradually restored to the upright position, by retracing the positions in which she had previously been placed, at the same time keeping the body constantly shaken. The heavy mercury could be detected by ballottement in the transverse colon. When in the erect position again, the mercury escaped into a basin. Continued improvement and a permanent recovery ensued, no distressing symptoms being present after the operation.

In the fourth case, which presented itself in May, 1868, a child, aged eighteen months, was attacked suddenly with vomiting and tenesmus, with mucous and bloody discharges. A distinct roll could be felt in the left iliac fossa, and the end of the invaginated portion could be felt per rectum. Dr. Ross adopted the same treatment as in the previous case, and with an equally happy result. The treatment occupied about half an hour, and recovery immediately followed. A portion of the mercury was retained eight or ten hours, but all that had been injected was secured, and no bad symptoms followed. These cases are interesting, and the treatment is unique. The diagnostic symptoms were well marked, and in view of the fatal termination of intussusception in many cases, the mode adopted so successfully in these is a valuable addition to therapeutics. Dr. Ross has had no opportunity of making a more extended trial of his remedy.

The *British Medical Journal* hears that in the London School of Medicine for Women there are at present upwards of twenty ladies studying.

Reviews and Book Notices.

TEXT BOOK OF HUMAN PHYSIOLOGY. By Austin Flint, jun., M.D. D. Appleton and Company, New York; Hart and Rawlinson, Toronto.

We must reserve a more extended notice of this valuable work until our next issue, as it requires a far more attentive persual than we have had time to give it, to do justice to what appears to be one of the most admirable text-books on Physiology that has been published in any country.

THE PHYSICIAN'S VISITING LIST. Compiled by Wm. Oldright, M.A., M.D. Wm. Warwick, Toronto, Publisher.

This is a new Canadian visiting list, and the advantages which the compiler claims for it are that being ruled for a month instead of a week, it saves a good deal of trouble in entering names, also in posting, the ledger folio being turned up only once instead of four times. This also leaves room for cash accounts, &c.

APPOINTMENTS.

DR. J. H. MCCOLLUM, who for the past four and a half years so ably filled the post of Resident Surgeon to the Toronto General Hospital, has resigned his position. Dr. McC. intends practising his profession in Toronto. We wish him every success. The vacancy has been filled by the appointment of Dr. Charles O'Rielly, for the past eight years Resident Surgeon to the Hamilton Hospital.

TORONTO LUNATIC ASYLUM.—Dr. Daniel Clark, of Princeton, has been appointed Medical Superintendent of the Toronto Lunatic Asylum. From the decided stand which the medical profession in Ontario have taken against the appointing of unregistered men with British diplomas to any public position from which they are excluded by the Ontario Medical Act, and from the well-known ability of Dr. Clark, we think that this appointment will prove acceptable to the majority. The independent and able manner in which Dr. Clark has filled the position of Territorial representative to the Ontario Medical Council is an earnest of what may be expected from him in the executive management of so important an institution. His well-known talents as a practitioner will soon render him familiar and expert in the treatment of those who, from the distressing nature of their affliction, call forth such large sympathy from the public, and invite the most thoughtful study of the physician for the alleviation, if not for the cure of their disease.

APPOINTMENT.—Henry Peterson, of the village of Linwood, Esquire, M.D., to be an Associate Coroner in and for the County of Waterloo.

Miscellaneous Items.

ANNUAL EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS, ENGLAND. — At a meeting of the Council, Mr. Marshall introduced an elaborate scheme, proposing that all intending candidates for membership or Fellowship should be compelled to pass a compulsory and authoritative elementary examination at the end of the first winter, or immediately after the commencement of the succeeding summer session. Mr. Marshall has been led to make this suggestion by the large number of rejections at the primary examinations, and the unsatisfactory kind of knowledge possessed by many candidates who do pass. Many students, who now squander away their time, would be induced to apply themselves to work. Although the scheme was kindly received by the Council, many objections were suggested, and the question was finally referred to a committee for consideration.—*London Lancet.*

THE PROPOSED NEW MEDICAL BILL—"To incorporate the members of the Medical Profession in the Province of Quebec, and to regulate the Study and Practice of Medicine and Surgery therein," was introduced by Mr. Chapleau on November 11th. The Bill as introduced incorporates the profession under the name of "The College of Physicians and Surgeons of the Province of Quebec," whose

affairs are to be administered by a Board of Governors, composed 1st., of two delegates from each of the Universities, Colleges, or Medical Schools incorporated in Quebec, and giving medical instruction, provided that no Professor belonging to such institutions become a member of the Board except as representative of the College to which he belongs; 2nd. of twenty-four territorial members elected as in Ontario. Many of the clauses in the Bill are similar to those in our Ontario Act. Elections are to be held every three years. The Board of Governors, as the Provincial Medical Board, shall meet twice a year to examine candidates, and shall have the power to grant licences without examination to any one with a diploma from a University or incorporated Canadian School; provided that the diploma shall have been obtained in conformity with the following regulations: 1st. All bodies teaching Medicine, Surgery, and Obstetrics, shall be required to have at the disposal of the pupils an hospital of at least 50 beds, a Lying-in-Hospital of at least 25 beds, a Library, Museum of Natural Philosophy, of Natural History, and of Botany, containing all instruments and objects deemed requisite by the Board to facilitate and illustrate the lessons by the Professors; 2nd. A Committee of three members, two named by the Board, and one by the Government, shall attend the examinations in the Universities and incorporated Schools, to ascertain if the diplomas are granted according to merit, and if the requirements of law are fulfilled. And if the delegates report that there is contravention, the Board shall have the right to examine those pupils anew, or to completely refuse the licence. The College shall have the power to regulate the admission by the Universities of Foreign Medical students, and also the granting of the College licences to foreign licentiates or graduates. A clause in the Act sets forth the course of study to be pursued.

Vaccination in the Quebec Legislature.—On November 11, M. Larue asked whether it is the intention of Government to establish an institution for experimenting in vaccination, and to furnish a pure vaccine, having all the qualities to insure confidence throughout the Province. Mr. Church said an item would be placed in the estimates for that purpose.

Ontario Medical Council and a Government Grant.—The sub-committee of the Executive Committee of the Council had an interview in October last with Mr. Mowat, with a view of obtaining a grant from the Government. Dr. Duncan Campbell, Chairman of the Board of Examiners, has, at the request of the Premier, noted down some of the facts upon which the application for help from the Legislature was made. He states as reasons, that the members of the Council are inadequately remunerated; that in view of the establishment of annual examinations, the expenses will increase; that a Medical Library and a Museum of Anatomy and Pathology are greatly needed; and that a building suitable for the requirements of the Council and Board of Examiners might be found in the present College of Technology, suggesting that the College of Technology might still occupy a part of the building, and be made an accessory to the Council, students being made to pass through a preliminary course in Practical Science. Six thousand dollars a year is the sum asked for, the intention and desire being to lower the fees for the examination.

Body-Snatching.—The *Globe* correspondent at Kingston says, "The police here are on a lively scent for medical student body-snatchers. Some persons offer a handsome reward for the detection of the thieves."

We are exceedingly sorry for our young medical friends of Kingston, as well as for those of Montreal, where we observe *they* have also been accused twice or three times lately of desecrating cemeteries to procure the necessary material for the prosecution of their anatomical studies. In former years the same practice had to be pursued in Toronto; but, thanks to our admirable Anatomy Act, the Medical Schools of this city have for many years been so abundantly supplied by law, that our young men have no occasion to risk life and liberty to procure material for dissection.

We remember when, before the above Act was passed, the late Dr. Rolph imported material from New York, rather than allow his students to desecrate the graves of the dead; but now, all persons without friends,—dying in

charitable institutions wholly or partly supported by Government aid—are handed over to the Inspector of Anatomy, and distributed by him among our Toronto Schools according to their several needs.

For many years various towns and municipalities have been in the habit of shipping their poor and their vagrants to Toronto, leaving them at the doors of our hospital and other charities, to be cared for by the city. In many instances within our personal knowledge they have been so weak that to have sent them back they must have died on the way; and the result has been, that our local charities, thus unjustly made the recipients of so many poor and friendless creatures from other municipalities, have been able to keep our medical schools fully supplied with material.

Dr. DeMarmon, in the New York *Medical Journal*, says: "For the last ten years the use of spirits has—1. Imposed upon the nation a direct expense of $600,000,000. 2. Has caused an indirect expense of $700,000,000. 3. Has destroyed 300,000 lives. 4. Has sent 100,000 children to the poorhouse. 5. Has committed at least 150,000 people to prisons and workhouses. 6. Has determined at least 1,000 suicides. 7. Has caused the loss, by fire or violence, of at least $10,000,000 worth of property. 8. Has made 200,000 widows and 1,000,000 orphans.

Royal College of Surgeons of England.—The following gentlemen, all graduates of Trinity College Medical School, passed their primary examinations in Anatomy and Physiology, at a meeting of the Court of Examiners, on the 9th November: G. H. Burnham, J. R. Clark, Colin McLarty, Thomas Millman, M. D. Stark. F. Buller, M.D., Victoria College, 1870, has passed the primary examination for Fellowship.

The International Congress of Ophthalmology will meet in New York City, on Tuesday, September 15, 1876, at twelve o'clock noon. The following extracts from the rules of the Congress will give an idea of the general character of the Society, and of the terms of membership:

"1. The object of the International Periodic Congress of Ophthalmology is to promote ophthalmological science, and to serve as a centre to those who cultivate it. It will entertain no discussion foreign to this object.

"2. The number of members is unlimited.

"3. Every member must be either a doctor of medicine, or of surgery, or of science, or possess some other equivalent degree, or be distinguished for his scientific knowledge.

"4. Candidates for admission into the Society shall be admitted on presentation of their diploma or of their scientific title, unless ten members demand a ballot.

"5. The sessions of the Society shall take place every fourth year, and be limited to ten days."

. . . . . .

"XI. The Society gives no diploma. Before the opening of each session a card available for admission to all the meetings, and signed by the President and Secretary, shall be given to each member on payment of his subscription (fixed at $2), and upon signature of his name on the register of those attending the meeting."

Among the members of this Congress are such men as Arlt and Stellwag, of Vienna; Giraud-Teulon and Wecker, of Paris; Helmholtz, of Berlin; William Bowman, George Crichett, R Liebreich, J. W. Hulke, and Soelberg Wells, of London; Donders and Snellen, of Utrecht, Holland.

It is hoped that many of them will come to New York in 1876. The committee are making all efforts to secure a large attendance, and one that will leave its mark upon the progress of scientific ophthalmology. The co-operation of the profession in Canada in securing these objects is earnestly desired by the undersigned, the Provisional Committee appointed in London in 1872.

Cornelius R. Agnew, M.D.
Henry D. Noyes, M.D.
Daniel B. St. John Roosa, M.D.

Births, Marriages, and Deaths.

BIRTHS.

On the 27th November, at 117 Church Street, Toronto, the wife of A. M. Rosebrugh, M.D. of a daughter.

On the 27th November, at Ingersoll, the wife of Moses E. Tripp, M.D. of a son.

On November 11th, at Hamilton, the wife of C. F. A. Locke, Esq., M.D., of a daughter.

On the 7th of December, the wife of the Rev. Samuel N. Jackson, M.D., Toronto, of a son.

DEATHS.

At Richmond Hill, on Monday evening, 6th inst., John Dunscomb, M.D., aged 74.

At Kingston, on November 10th, from inflammation of the lungs, Octavius Yates, M.D., Professor of Institutes of Medicine, Royal College of Physicians and Surgeons, Kingston.

THE

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R. ZIMMERMAN, M.B., L.R.C.P., London, *107 Church Street, Toronto, Corresponding Editor.*

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TORONTO, FEBRUARY, 1876.

Selections: Medicine.

DIARRHŒA—ITS VARIETIES AND TREATMENT.

BY J. MILNER FOTHERGILL, M.D.

(Continued.)

At other times diarrhœa, persistent or repeated, is a consequence of congestion of the portal circulation. Very commonly it is the result of obstruction in the liver, especially when that organ is the subject of cirrhosis. Here the substance of the liver is compressed and bound down by contractile and contracting pathological connective tissue; and in this compression the blood-vessels share; not uncommonly, indeed, the venous radicles are the subject of phlebitis; and then the flow of the portal circulation is interrupted. As a consequence, the venules of the intestinal canal are turgid and full, and a serous fluid drains away from the mucous surface of the bowels. Very commonly at the same time there is an accumulation of fluid in the peritoneum from a like condition of the venules of the serous membrane. The diarrhœa which shows itself under these circumstances is a natural discharge, affording relief; and, instead of attempting to check it, it often becomes desirable to increase it by the administration of cathartics.

In determining upon the plan of treatment of any diarrhœa, it first behoves the practitioner to make his diagnosis clear, first as to the exact amount of the discharge, and secondly, what is far more important, to determine carefully and painstakingly what that discharge is due to. It is often as necessary to nurse and even encourage a diarrhœa as it is at other times imperative to arrest it. The popular impression that every abnormal discharge is to be arrested, is as fallacious as the impression that purgatives are indicated in the locked-up bowels of ileus. A striking and painful instance of this will be given shortly, which will be followed by an equally illustrative case of the good to be derived from declining to arrest a diarrhœa under certain circumstances.

What holds good of the diarrhœa of cirrhosis and ascites holds equally good of the serous diarrhœa, which is so commonly found in the later stages of valvular disease of the heart, or of right side failure from obstruction in the pulmonary circulation due to chronic disease in the lungs. Under these circumstances, there is general venous fulness, and this is most felt in the radicles of the valveless portal circulation. Consequently, there is gastric catarrh, with its pathognomonic symptom, persistent sense of fulness, and a looseness of the bowels, often ascending to sharp diarrhœa. Here it is also far from good practice to attempt to arrest the intestinal flux by astringent remedies. It is better far to nurse it, as long as it is not positively and unquestionably doing harm; and to do away with the necessity for it by acting upon the heart by digitalis and iron. If the circulation can be improved, and the condition of venous congestion done away with, then the diarrhœa will pass away with the condition upon which it casually depends. This method

of treating it is both rational and effective. Sometimes a little serous oozing remains after a free spontaneous catharsis under these circumstances, or after its induction by mechanical agents, and this teazes the patient at night, either causing him to get up, or passing off during sleep. A dose of five grains of myrrh and ten of bismuth at bed-time will be found effective here, and may be resorted to without the fear which attaches to opium and its derivatives. Of course it may become necessary to resort to astringent measures; and if it is so, sulphuric acid, with hæmatoxylin, or the astringent preparations of iron, are the best means of attaining the desired end. But the only treatment, as a rule, to be invariably followed is the relief of that condition of the portal circulation upon which the diarrhœa depends.

At other times diarrhœa may be a compensatory action of the bowels, especially in conditions of renal embarrassment. Here it is termed uræmic diarrhœa. This is a much more common condition than is generally imagined. It is, however, one of those matters which is not patent to the casual observer, and is one which can only be detected ordinarily by the eye which has learned to see it. In the diarrhœa of elderly persons, especially when recurrent, this association will be found to exist very frequently. When called to a patient suffering from a sharp diarrhœa, there is little time and less opportunity to make a thorough diagnosis, especially as the urine is scanty and possibly albuminous without there being renal disease, and a careful investigation of the past history is all that can be relied upon. Often the materials so furnished are insufficient to prevent mischief. The following case is instructive in its sad history. Just on entering practice, I was called to a woman of forty-eight who was seized with purging. She had frequently had similar attacks, which had never been very amenable to treatment. As the woman was far from being strong, the friends were very urgent about the necessity for early arrest of the discharge. The motions were watery and copious, and the amount of urine very small, and none could be secured for examination. After various combinations of astringents, my efforts were unhappily sufficiently vigorous to be successful. In thirty-six hours after the cessation of the alvine flux, uræmic coma came on, which terminated fatally. After a careful investigation of her history, it became certain that the unfortunate woman was the subject of chronic Bright's disease, and the discharge I had done so much to arrest was a compensatory action, and not a morbid process, in fact, it had brought to a close the only action almost by which the organism could have been preserved. Regret was unavailing, but the case brought forth fruit on an after day.

Some little time afterwards an opportunity was afforded of watching the play backwards and forwards betwixt the kidneys and the bowels in an old man. During one paroxysm of renal engorgement, accompanied by free purgation, no water having been passed all day, I passed a catheter into the bladder to make sure that it was empty, as percussion had indicated. The bladder was empty. In a few hours the diarrhœa ceased, and he passed two pints of water. After repeated oscillations betwixt the kidneys and the bowels, the alvine flux each time being less and less, matters once more became normal. Arrest of the diarrhœa here by powerful astringents would probably have been fatal, as in the case just given.

A very striking case came under my care a year or two after this. An old woman, long the subject of renal disease, with a dilated heart, was seized with diarrhœa. The urinay secretion was scanty, and there was aching through the loins, &c. I declined to attempt to arrest the discharge, but gave the patient nutrient support, and applied large poultices, dusted with mustard, across the loins, as preferable to cupping; and after the alvine flux might have fairly been supposed to have somewhat relieved the renal embarrassment, mild, non-irritating diuretics (potash with buchu) were prescribed. The domestic arrangements did not permit of any bath then procurable, but hot bottles were placed in the bed. For some days the case went on; a brown, furred tongue, headache, and increasing stupor, a urinous odour of the breath, *ureous* vomiting, and a strong odour from the skin, vindicated the hypothesis of the uræmic nature of the diarrhœa. All hope was

abandoned; but after a little time the kidneys resumed their function, the diarrhœa ceased, and the urinous odour disappeared, and ultimately the old lady got well. This case contrasts very forcibly with the one first related.

In all cases where the diarrhœa takes its origin in uræmia and the process is a compensatory and conservative one, our line of treatment is not to attempt to arrest the diarrhœa until the ordinary channel is once more patent. If the diarrhœa is profuse and tending to exhaustion, it is well to act freely upon the skin, especially by external measures, the warm bath, &c. Opium in all its forms is strictly contra-indicated here, despite its well-known action on the skin. At most, all that may be adventured in the way of checking the action of the bowels is the administration of iron, and the pernitrate with nitrate of potash has furnished satisfactory results; while the attempts to restore the action of the kidneys by counter-irritation across the loins must be persisted in. During this time the patient must be supported by nutrient bland food; milk and seltzer-water, sago and arrowroot with milk, or a little beef-tea or mutton-broth, are the best measures, care being taken not to give beef-tea in such quantities as to add further to the load of nitrogenized waste. Alcohol in small quantities is not inadmissible. The treatment must be watchful, and eminently conservative. No sudden *coup de main* is to be essayed; but the case is to be carefully steered through its numerous difficulties, warily and skilfully indeed if a successful result is to be achieved.

Such is the line of treatment to be pursued in a large and most important class of alvine fluxes, especially met with in elderly persons. Whatever has been said here applies equally to the endemic diarrhœa, which is so commonly met with after scarlatina, when the kidneys are affected.

Finally, a word as to the external applications which may be resorted to in the treatment of diarrhœa. To relieve the pain produced by the peristaltic action, hot flannels wrung out of hot water, and sprinkled freely with laudanum or turpentine, or both, and applied across the abdomen, are very useful. Also enemata of starch and laudanum may be resorted to with advantage in severe cases, provided opium is not contra-indicated. When there is much tenesmus, a morphia suppository is a comfortable thing; and if there be any tendency to form hæmorrhoids, a suppository of morphia and gallic acid is indicated.

In the more persistent diarrhœas of infants, accompanied by much wasting, and especially in that form described by the old word lientery —where the food is passed almost unchanged— rubbing the child all over with olive oil once or twice daily is an excellent measure. By this means nutriment is absorbed, and the child is fed, so that the system is often enabled to recover itself, and the diarrhœa is ultimately subdued.

As to those forms of intestinal discharge known as colliquative, as depending upon tubercular disease, or enteric fever, they cannot be entered upon in this article. The two first depend upon the general condition, and their treatment is part of the general treatment —matters too wide to be considered here; while as to the third, it has been fully discussed in a recent number.—*Practitioner.**

REMARKS ON CHRONIC DYSENTERY;

With the History of a Case of Five Years' Standing Cured within Five Weeks by Topical Treatment. — *By T. Gaillard Thomas, M.D.*

There are few curable diseases which offer a more unfavorable prognosis than chronic dysentery. The dangers which attend the affection in its most acute stages are greatly increased in that in which painful, hæmorrhagic, and intractable ulcers cover the surface of the rectum and colon, and exhaust the patient by loss of blood, constant pain, frequent evacuations, and the intense nervous depression which attends such cases.

The following case is related to show the wonderful results which, sometimes at least, follow local treatment in this intractable disease:

*In the first part of this article, in our last issue, for "a grain and a half of opium," the author evidently means "*a grain and a half of Pulv. Cret. Co. c Opio., or Pulv. Ipecac. Co.*"—Page 3, line 24.

The history as given by the patient was this: On the 9th December, 1870, at the moment that she received the unexpected tidings of the death of a brother, she was suddenly seized with acute dysentery. This became chronic, and exhausted her by the severe pain, frequent evacuations, and hæmorrhages which accompanied it. At short intervals acute attacks would be engrafted upon the chronic state, apparently excited by indiscretions in diet or unusual fatigue, and in some of these her condition became alarming. In her written statement she says: "I have been ill for five years; even when able to sit up and go about the house I have had constant dysentery; the smallest number of actions from my bowels being eight, all containing blood and mucus. It was no rare thing for me to have twenty-seven and more actions a day; on these occasions I would lose a large quantity of blood. I lost colour, appetite, strength and spirits, while my nervous system was in a most painful condition."

On the 19th September, 1875, Dr. H. F. Walker anæsthetized the patient, and I proceeded to make a thorough examination of the rectum. After etherization she was placed in the left lateral position, and, after stretching of the sphincter ani by the fingers, a long duck-bill speculum was introduced. This was held by my nurse exactly as in vaginal examinations, while by a depressor I pressed downward the anterior rectal wall. No one who has not examined the rectum in this way can imagine the facility with which the whole canal can be seen. In this instance it was perfectly exposed up to the sigmoid flexure. I now cleansed it of all fæcal matters by a long glass tube so bent upon itself at its upper extremity as to throw a stream of water from a Davidson's syringe back towards the anus. Throughout the whole extent of the intestine exposed to view, the mucous membrane was seen swollen, ædematous, hanging in hæmorrhoidal masses and studded with deep ulcers with grayish bottoms. It was greatly engorged, and presented that deep red, almost violet hue which is seen in the throat in cases of diptheria. On this occasion no application was made, and, as the anæsthetic had disturbed the patient's stomach and rendered her nervous, nothing more was done until September 30th. Then, ether being again administered, and the bowel thoroughly cleansed, I wrapped a small piece of white cotton around the end of a whalebone rod, and, dipping it in commercial nitric acid, lightly touched the swollen mucous membrane and all the ulcers intervening between the sigmoid flexure and the anus. No superfluous fluid was allowed to attach itself to the cotton, and the cauterization was nowhere so decidedly practised as to render the occurrence of sloughing possible. Upon recovery from the anæsthetic a slight amount of pain only was complained of, and writing of the subsequent effect the patient says: "It soothed me and I slept well. This was the first real respite which I had experienced in five years." At this time the patient was confined to a milk-diet as much as possible, and limited as to exercise. This application proved of decided benefit in diminishing the number of evacuations, the amount of blood passed and the degree of pain experienced. On the 6th October, another application of nitric acid was made. This proved still more beneficial. After it the milk diet was more strictly adhered to, and exercise was more restricted. On the 11th October, the third and last application was made; the ulcers had almost entirely disappeared, the mucous membrane was much less swollen, and the appearance of engorgement much modified. After this the milk diet was strictly adhered to and the patient for ten days confined to bed. The result of this application surprised me. Blood ceased to pass with the evacuations; these in three days became limited to one in twenty-fours; all pain ceased; and the patient rapidly improved in general health. On the 22nd of October the patient left her bed, began to eat small amounts of animal food and bread, rode out every day, and on the 29th of October returned to her home in Kentucky.

To me this case presents itself as one of great significance. I cannot look upon the result obtained as an accident alone, and I regard it as one second in interest to none in my experience. Here we have a case of chronic dysentery of five years' standing, cured by three applications to the ulcerated rectum, the whole time of treatment being comprised between Sept. 30th and Oct. 29th. Some may lay great stress upon

change of air and strict adherence to the milk-diet. This feeling I cannot share, for I have too often seen these fail in such cases, and they had signally failed in this case when previously tried. There is, I think, no room for doubting that the cure was effected by cauterization of the rectum as above described.

In this case I preferred using nitric acid to nitrate of silver, for the following reasons: it is less painful; more effectual, and equally manageable caustic. I have for years used it almost universally by preference; and the pathological condition exposed to view seemed so grave that I dared not trust to the milder caustic, for the fear that the frequent repetition which would be necessary might exhaust the slender stock of patience left to my disheartened and nervous patient.

Of course the idea will at once suggest itself that nitric acid might create subsequent rectal stricture. I had no fear whatever on this point, for it acts in this way only when applied strongly enough to create sloughing of the superficial tissues and deposit of lymph, the result of inflammatory action in the deeper ones. My use of the caustic was entirely too light for such a result to occur.—*New York Medical Journal, Jan.* 1876.

TREATMENT OF CHOREA.

BY S. JACCOUD, M.D.

* * * * * * *

The girl whose history I have recounted to you leaves the hospital this very day. She is perfectly cured, making the fifth successful case which I owe to the treatment proposed by Lubelski—that is to say, to the application of ether spray to the vertebral region. A jet of ether spray is projected on each side of the spinous processes over the whole length of the spinal cord. The application should cover a space equal to the breadth of four fingers, on each side of the spine. To begin with, the applications are only made twice a day, morning and evening, and for about three minutes; but in two or three days it is expedient, in severe cases, to repeat the operation three, or even four times a day, and to prolong each sitting to five or six minutes. Under its influence the diminution of the choreic movements is very rapid—a matter of a day or two—and it would seem, that this abatement is most prompt when the symptoms are most violent; but this preliminary arrest once obtained, complete recovery may be delayed for two, three, or even four weeks. Nevertheless, the remedy has several times failed to fulfil expectation; but this should not cause you any surprise, nor deter you from the use of this very simple remedy. The same thing occurs with all the remedies for chorea; you will not find one that is invariably successful. The best—and amongst these I rank the application of ether spray—have their reverses. I employed, with entire success, the bromide of potassium in full doses in a case of chorea during pregnancy. The equally convincing observations made by Gubler, Gallard, Werms, Hough, and Kesteven, fully justify this therapeutic experiment. The results obtained from chloral are no less encouraging. Gairdner's case clearly proves the influence of chloral over choreic ataxy, but it would be imprudent deliberately to repeat the experiment. A girl eight years of age, affected with chorea, took 46 grains in mistake for the 15 grains prescribed for her. Serious indications of poisoning ensued, and when they had been overcome the choreic symptoms had entirely and permanently disappeared. The arsenical treatment has for a length of time given proofs of its efficacy, but I am unwilling to let the opportunity pass of, pointing out to you the mode of administration, and the successes of my learned *confrere* and friend, Professor Wannebroucq, of Lille. He employs the arseniate of soda dissolved in water, commencing with a daily dose of $\frac{1}{14}$th of a grain, he gradually increases it by additions of $\frac{1}{35}$th of a grain at a time, to a maximum dose of $\frac{3}{14}$ths to $\frac{4}{14}$ths of a grain. He concludes from the cases he has observed that somewhat stronger doses administered for a short time are more efficient and less dangerous than weaker doses continued over a longer period. He has succeeded, in four instances, in curing obstinate chorea in 8, 12, 16, and 21 days respectively. In eight cases in which Rodolphi tried the chloride of calcium, all were successful; the duration of the treatment varied from 8 to 14

days, and the daily dose reached from 7½ to 15 grains. The eight patients were children. Along with the chloride of calcium, Rodolphi also administers day by day the extract of belladonna, and the intervention of this remedy necessitates considerable reserve in the interpretation of his results. The sulphate of aniline, advocated by Turnbull, ever since 1854, is credited to-day with a certain number of cures. The medicine is administered in solution, in doses reaching from 2 to 8½ grains daily; a a drop of sulphuric acid is added to the solution. Some cases established the utility of calabar bean. A tincture is made of one drachm of the bean to one ounce of rectified spirit. Dose, 15 minims to a drachm.

Lastly, I am desirous of calling your attention to the powerful efficacy of the constant current. The application should be made over the vertebral region, with an ascending current so weak that the patient shall barely feel conscious of it. It is used once daily, at first for a minute and a half, afterwards from two to three minutes. I will bring this account to an end by a remark of a general character which must be constantly present to the mind of anyone who is desirous of estimating the value of a remedial method: chorea may get well of itself after a duration of 50 to 66 days. If, therefore, any treatment only proves efficacious in a length of time almost equal to the one I have mentioned, the termination of the disease may be attributed to its natural and favourable evolution quite as fairly as to medical intervention. On the other hand, a chorea which lasts beyond three months has lost all chance of a spontaneous cure; it has become chronic, and we know what tenacity is involved in that character—above all, in the adult, consequently, a remedy which overcomes a chorea of several months' standing may be legitimately pronounced efficacious.—*Medical Times and Gazette.*

Death of Mr. Acton.—William Acton, M.R.C.S., Eng., died suddenly on Dec. 7th, 1875, aged sixty-two, from fatty heart. Mr. Acton was well known as the author of several works on syphilis and genito-urinary diseases.

TREATMENT OF CALCULOUS DISEASE OF THE KIDNEYS.

BY W. F. M'NUTT, M.D., M.R.C.S., L.R.C.P. EDIN., ETC., SAN FRANCISCO, CALIFORNIA.

* * * During a partnership of over four years with a gentleman of this city (who is himself a man of remarkable professional instinct and ability), he passed hundreds of renal calculi. Most of them, it is true, were small, but a few were large, and their passage caused the most excruciating pain; one stone in particular, its passage from the kidney to the bladder having occupied ten days, caused the most fearful suffering and extreme exhaustion: in fact, our patient had for twenty-four hours all the symptoms of impending dissolution.

During these four years we read, and continue to read, everything procurable on the subject of "Calculous Disease of the Kidneys." I may say that this gentleman has tried various plans of treatment to prevent the formation of gravel, but with little or no success, as he is still manufacturing stones, having voided over seven hundred and fifty in one day a few weeks since. They had probably been several days accumulating in the bladder. The treatment employed by this gentleman in his own first few severe attacks, and also in those of other patients at that time, was exactly that recommended by Dr. Basham in the articles to which we referred. In fact, it was what all good authorities advised. We thought, like Dr. Basham, that "the most effective treatment is the hot bath, aided by anodynes. The combined effect of moist heat and opium relaxes the spasm of the duct, and relief is safely obtained. . . It is very rare to witness a case in which the paroxysmal colic is not speedily relieved by opium and the hot bath. The temperature of the bath should be maintained at as high a degree as the patient can bear; the more profuse the perspiration induced the more speedy will be the relief." (*Practitioner*, Jan. 1875, p. 30.)

I have no hesitation in saying that this treatment advised by authors is at variance with our experience, as well as opposed to common sense and sound reasoning. It implies that it is by relaxation of the ureter that the calculus passes. And here is the mistake; it is no such thing.

The calculi are driven through the ureter by the accumulation of urine behind them. The urine furnishes the *vis a tergo* without which no possible relaxation of the ureter will allow a calculas of any considerable size to roll through it.

It is true that the very hot bath, the profuse perspiration, and the opium, relieve "the paroxysmal colic; but if the impacted stone is large it is a dangerous relief—it is bought too dear.

The opium benumbs the sensibility of the patient, the profuse perspiration checks the excretion of the urine, destroys for a time its *vis a tergo*, and the patient is lulled for the moment; and because the stone is not being forced onward. Thus is the patient subjected to the risks of ulceration from impaction, and perhaps death from exhaustion or perforation. As we have no means of measuring the size of the stone when called to treat a case of a renal colic, our treatment should not be to prolong its passage. And this is exactly what we do with the hot bath and profuse perspiration, and what caused the calculus in my partner's case to be ten days passing. A few days since I was called to see a Mr. Barton, who was thought to be dying. I found him in bed in great agony, bathed in perspiration, intense pain in the side, shooting down the track of the ureter to the bladder and testicle, with severe pain in the head of the penis.

Immediately recognizing that the *lapis infernalis* had started on its journey, I gave one grain of morphine subcutaneously; ordered him to get up and dress in his wrapper, and walk the floor. Had prepared for him a pitcher of flax-seed tea, with cream of tartar, ice cold, and ordered him to walk and drink and drink and walk, and to rub his side downwards along the line of the ureter, with orders to use a suppository—Morph. sulph. gr. ss., ext. hyoscy. gr. v. ol. theobrom. q. s.—every second hour while the pain continued. In two hours we had the gratification of seeing a good sized stone. I made him walk because one can endure pain better while walking than when lying in bed, also to get the advantage of gravitation, and that the jar of walking might assist the descent of the stone: the flax-seed tea with cream of tartar ice cold, to cause diuresis and supply the *vis a tergo;* the morphia to enable him to endure the pain of the dilatation of the ureter, the pressure of the urine, and the passage of the stone. This I claim is the rational treatment for renal colic.—*Practitioner.*

LOCAL TREATMENT OF DIPHTHERIA.

The local application of iodine acts not only as a caustic, but, I believe, confers a modifying influence upon the secreting structure, and further brings into action the power of the absorbents; thus tending to retard the spread of the membrane and to promote the removal of that which is formed. I am aware that, in urging this treatment, I am at issue with many who contend that this disease being a general one, depending upon certain changes in the blood by the introduction of a specific disease-poison, it is useless to attack the local manifestation of the disease any more than the pustules of small-pox. To those I would call attention to John Hunter's axiom, that two similar diseases cannot co-exist in the system at the same time. For example, he states that, if you can succeed in changing the nature of an inflammation you can often cure the original complaint. Higginbottom's method of arresting the spread of erysipelas by vesication with nitrate of silver is a familiar illustration of this Hunterian law; and if that treatment be effectual in erysipelas, why should not a similar treatment be equally efficacious in diphtheria? Again, I believe that the local manifestation of blood-poison is of itself a great indication of treatment; for do not all poisons have some definite and specific action on some membrane or organ? Thus, does not arsenic exert its influence chiefly on the mucous membrane of the stomach; colchicum on the ligaments; cantharides on the kidneys; and strychnine on the spinal cord? Then why should not the throat be the chief seat of the diphtheritic poison, and if so, why should not the rational treatment be to arrest and destroy it at its first encampment? Again, if my experience be correct, that one of the most formidable symptoms we meet with is the extension of the membrane to the nares and trachea; and, if my opinion be correct, that it does not arise there by an independent centre, but by the extension

of the membrane from the fauces,—is not this an additional reason for staying the progress of the membrane and limiting it to the fauces, whether we adopt caustics or any other means with that object in view? That iodine possesses this property, I feel convinced; and as I am not reading to you a treatise on diphtheria, but simply my own experience, I shall not enter into the merits or demerits of the various remedies which have been vaunted by numerous successive writers. The efficacy of any treatment is proved by its results; and, as I have stated, out of fifty-six cases which I have noted, seven died, of which five were moribund when seen, and only two died fairly after treatment. There yet remains to be mentioned other minor points, which are of considerable importance to the suffering individual, by which we may alleviate suffering and hasten recovery. For example, when the patient complains of sore throat, *ab initio*, I have found an iron gargle (two drams of the tincture to half a pint of water) beneficial; but this I have found too cutting when the membrane has disappeared, and then I have substituted one of borax and glycerine (two drams of the former and one ounce of the latter to half a pint of water;) and this gargle I have also found very useful to relieve the sensation of bread-crumbs and tickling in the throat, of which complaints are frequently made during convalescence. Where the denuded surface has proved to be ulcerated, a few touches of nitrate of silver assist the process of repair; and in one case where the tongue and roof of the mouth was so sore that everything that was taken gave pain, I found that great relief was experienced by applying dry trisnitrate of bismuth powder with a camel's hair pencil just before taking food. In paralysis of the soft palate and regurgitation of fluids through the nostrils, holding the nose during deglutition will be found very much to assist the act; this a patient of mine found out for himself, and I subsequently confirmed his statement in other cases. In these cases, too, I always advise thick drinks, which are more easily swallowed. When the pharynx is also effected, a large bolus is much more easily passed down than a small one, so that I have advised the collection of all the food in the mouth into one mass before swallowing. This is, no doubt, accounted for by the weakened muscular fibres of the pharynx being enabled to grasp a large bolus with less contractile effort than would be required for a small one. In one case I kept the patient alive for some days by giving the yolk of an egg unbroken, and letting it glide down his throat, as it were.—*Prangley in British Medical Journal.*

LEUKÆMIA A PRIMARY BLOOD-DISEASE.

Professor Biesiadecki, of Cracow, has lately advocated a new theory as to the nature of leukæmia, founded on the results of the careful anatomical and microscopical examination of certain cases which have come before him, as well as on other considerations. He believes leukæmia to be a primary disease of the solid elements of the blood (*enie Parenchymerkrankung des Blutes*), in which the white corpuscles are produced normally, but are afterwards prevented from developing into red corpuscles by retrograde changes which they undergo, so that the number of the latter cells appears to be diminished.

Biesiadecki regards the anatomical alterations in the spleen, lymphatic glands, liver, kidneys, etc., as due *secondarily* to the altered proportions of the elements of the blood. His reasons for this opinion are as follows (*Centralblatt*, No. 44. s. 757):—1. Neither the spleen nor the lymphatic glands, although so much increased in size, exhibit such changes as should lead one to conclude that there must be a greater production of white blood-corpuscles in consequence. 2. In leukæmia, not only the parenchyma of the spleen, but also of the enlarged liver, and of the kidneys, is not only not hypertrophied, but, on the contrary, is in a state of atrophy. 3. The colourless blood-corpuscles are not only relatively more numerous in leukæmia, but they are also of greater size, owing to a kind of colloid degeneration of their protoplasm. 4. These degenerated cells are deposited in the same organs and parts of organs as those in which blood-cells containing pigment or vermilion collect. 5. In Biesiadecki's special case

a striking alteration was observed in the blood, before any swelling of the lymphatic glands or any sign of the tumours which afterwards appeared in the skin had been noticed. 6. After extirpation of the spleen in animals, neither the blood nor any organ exhibits important alterations.

While speaking of leukæmia, we may mention that Dr. Ordenstein, of Paris (*Centralblatt*, No. 42, s. 709), suggests the possibility of a connection between that disease and hereditary syphilis. He discovered that the father of a patient of his with splenic leukæmia had had constitutional syphilis, and this fact led him to try anti-syphilitic remedies on the son. Van Swieten's liquid—a solution of bichloride of mercury—was given for several months with surprising benefit, all other previous treatment having signally failed. The author promises to publish the case *in extenso*.—*Medical Times and Gazette.*

PNEUMONIA.

Dr. Thomas Barr, in an interesting article on this disease (*Glasgow Med. Journal*, July, 1875), based on sixty-four cases in private practice, gives the following as the treatment he adopted :—

1st. I have never employed general blood-letting, and, with the exception of the man who died from gangrene of the lung, I have never used even leeches. I think few of my readers will consider that in my cases of death the fatal result would have been prevented by depletion.

2d. I have in a few employed antimony in what might be called antiphlogistic doses. I generally used it for its expectorant and diaphoretic effects, and have very rarely used it at all with children under five years of age. I very often find patients suffering from the disease, with an irritable stomach, perspiring skin, and soft pulse. In strong adults, with very acute symptoms, and none of these contra-indicating signs, I have used it in full doses with great advantage.

3d. Mercury. I have not used this medicine at all, unless as a simple aperient.

4th. Opium. I think I have seen more good done by this drug than by any other single remedy. It gave comfort to the patient, relieving pain and allaying cough.

5th. Diaphoretics and expectorants have been given with advantage. These classes of remedies also include small doses of opium and tartar emetic.

6. External applications. At early stages I have found most comfort from poultices of linseed meal and mustard, frequently repeated ; while blisters were reserved for the more chronic stages, when the condensation of lung seemed to linger longer than usual.

With respect to the treatment of the children in whom the most of my fatal cases occurred ; with the belief which I entertain of the real cause of danger, I have only adopted the restorative treatment. I have altogether eschewed bleeding, antimony, mercury. I have, of course, carefully confined the patient to a well-ventilated apartment (he requires all obtainable oxygen), with a comfortably warm temperature, giving liquid diet, milk being the staple. If an infant at the breast, I limited its supply of breast-milk, and rather relieved its thirst by administration of cold barley-water ; in the way of medicine, giving a diaphoretic mixture, small doses of ipecac. wine, sweet spirits of nitre, tincture of hyoscyamus, and solution of acetate of ammonia. Good has been done by allowing boiling water to evaporate near patient. Repeated linseed meal and mustard poultices to back and front of chest have often done great good. As night approaches, the little patient often becomes very restless, annoyed by a constant hacking cough. Then I have often found the greatest benefit from a dose of Dover's powder, preferring to give one single full dose at night to small ones frequently repeated. Of course, if the case is complicated, with pent-up secretions in the air-tubes, I have avoided the Dover's powder. When the child is feeble, great benefit is derived from liniments to the chest, while beef-tea and brandy were often absolutely necessary to uphold strength till the patient passed through the crisis of the disease.

He states that " when one reads the statistics of hospital writers respecting this disease which have of late years been published, it requires not a little courage for a private practitioner to

announce that he has had a mortality of one in six. But, supposing I selected my cases, and gave those only between the ages of six and fifty years, the ratio of deaths would be one in twenty-one, while of the forty-two cases between five and sixty-two, only two deaths took place."

TREATMENT OF THE SEQUELÆ OF DIPHTHERIA.

The treatment of the numerous sequelæ is difficult to formulate. I believe time and *vis medicatrix naturæ* to be our most important agents; yet something can and ought to be done, for it would indeed be cruel to leave a poor patient totally paralysed without the hope of some assistance to the slow progress of nature. In those cases I generally prescribe the liquor strychnia in five-minim doses, gradually increased to twelve, three times a day; but I candidly confess I think it often did no good; for I well remember one case in which I gave it for a whole month, the paralysis steadily increasing the whole time. I then left it off, and prescribed a liniment as a *placebo*, when gradual improvement commenced, and recovery ultimately took place; but on other occasions I have found it decidedly of service, though I am doubtful whether it be more active than quinine, mineral acids, and other tonics. I believe we better show our discretion by changing our tonics till we find the one best suited to the individual case, than by habitually using one formula indiscriminately. In addition to the tonic regimen, I recommend, when practicable, a judicious change of air and scene. On one occasion, I had recourse to galvanism, with no satisfactory result. I believe that rubbing and shampooing the limbs is of some service; at all events, it does no harm; and the simultaneous use of a little embrocation no doubt assists the charm. Some of the dyspeptic symptoms I found very troublesome to treat. As a rule, bismuth gave the most relief, combined with bland nourishment; and, when the acute symptoms had subsided, a combination of quinine and strychnine was of marked benefit in giving tone to the digestive organs.

For the tendency of faintings, which sometimes occurs, I have given a dose of ether; but what is most important is to enjoin the recumbent posture till convalescence is well established; and even then I recommend a little wine to be taken before any exertion is used.—*Prangley in British Medical Journal.*

Surgery.

ON THE TREATMENT OF AMPUTATIONS BY THE OPEN METHOD.

It appears that for the last year or more the amputations in one of the Surgical Divisions of Bellevue Hospital have been treated by the open method, i.e., by allowing the flaps to remain open for a week or so after the operation, so that there is a free ingress and egress of air, and a free vent is given to the discharge. This plan of treatment has been for some time practised in the Continental Hospitals, more especially during the late war.

The House Surgeon, Dr. F. D. Dennis, gives in the January number of the New York *Medical Journal* an account of this peculiar mode of treatment, as it has been carried out in the Bellevue Hospital, together with the results attending it.

The mode of amputation adopted in most cases was the lateral skin flap. After the operation the flaps were not even aproximated, but left entirely open. A pillow of oakum is placed under the stump, which is allowed to rest upon this support until the wound is nearly healed. A small piece of gauze is placed over the contour of the stump; and a cradle is placed over the limb, so that the clothes may not come in contact with the painful extremity. This is all the dressing that is employed; no sutures are used except in the lateral skin-flap method, (as will be described). No adhesive plaster is employed, no oil-silk is placed over the stump, no bandage is applied, no dry charpie is stuffed into the wound, no fenestrated compresses are placed between the flaps; in other words, the stump is left entirely alone, just as the surgeon made it in his amputation. The wound is thus allowed to drain freely, and the stump is gently washed at

frequent intervals by means of an Esmarch's wound-douche. The water in this irrigator is impregnated with crystals of carbolic acid, and, after this ablution, balsam of Peru (which makes a fine stimulating application) is poured over the granulating surface. The discharge which falls from the wound is removed every few hours in order to secure perfect cleanliness; and it is a fact worthy of observation that this discharge will not decompose when exposed to the open air, but that it requires a warm temperature, such as exists in the stump itself, in order to develop putrefaction. The pus, thus coming away from a nidus of putrefaction which would otherwise be formed, falls upon a piece of sheet-lint where the temperature is cooler, and thus does no harm. The stump is then washed at fequent intervals until suppuration has nearly subsided in the wound, and then the flaps are gradually approximated by means of strips of adhesive plaster. Too much importance cannot be attached to this method of operating by the lateral skin-flaps. It affords the best facility for free drainage, and makes the most serviceable stump. It is important to dissect the flaps very long, when they are subjected to the open treatment, as shrinkage often follows exposure to atmospheric influences. This lateral-flap method of amputating Dr. Wood has employed for many years in private practice with uniform success. The line of incision is comparable to a Baron Larrey amputation at the shoulder-joint. Dr. Wood has used this style of flaps on the thigh, leg, arm, and forearm, and has in every case found the stump to be a most satisfactory one. In all the cases reported this style of flap has been cut, with one exception, and mention will be made of this in the history of the particular case. Esmarch's elastic bandage has been employed in every case, and in no instance has sloughing, or any other complication, occurred. The stump after a week is capable of being moulded into any shape, which the surgeon's taste may suggest. During the entire healing of the wound the greatest possible care is exercised in reference to the use of the instruments necessary to perform the dressing of the stump. No sponges are ever used in the wards. Each patient has his own bottle of balsam of Peru, and every instrument used in the dressing of one stump is thoroughly washed in carbolic-acid water before it is employed in the dressing of another. So far as has been practicable, a different set of scissors, dressing-forceps, and other instruments employed in the manipulation of a dressing, has been used, so that each patient had his own instruments, and in this way absolute cleanliness is secured. Each dresser invariably washes his hands in carbolic-acid water after dressing one case before undertaking another, and anyone who is dressing unhealthy wounds in the pavilion, or making autopsies, is not allowed to even assist in the daily dressing of healthy wounds." This mode of treatment is of course better suited to Hospital cases than those in private practice, as Pyæmia. Septicæmia, and local abscesses occur more frequently in the former than in the latter. The advantages gained by it, according to the writer are,—(1) That suppurative fever is very much modified, and in some cases almost obviated. The temperature in none of the cases was higher than 103°, whereas it often rises to 104° or to 105°, and in some cases even to 106° in those treated in the ordinary way. (2) It prevents all possibility of the formation of abscesses in the neighbourhood of the stump, and at the same time lessens the tendency to Erysipelas. In illustration of this, two cases are given which entered the Hospital at the same time and under very similar circumstances. In the one treated by the old method, Erysipelas and Abscesses followed, whereas in the case treated according to the new plan no such bad consequences ensued. It was not found that flaps sloughed, or that secondary hemorrhage ensued to a greater extent than in stumps treated by sutures and adhesive plaster. The honour of introducing into this continent this plan is due entirely to Dr. J. R. Wood, of New York.

The opinions of surgeons have of late years changed considerably as to the propriety of allowing the entrance of air into wounds. Billroth, in the latest edition of his "Surgical Pathology," says that "free air does no harm; imprisoned air is dangerous." He further says, "the idea that air was injurious to a wound rests chiefly upon the observation that the entrance of air to abscess cavities with rigid

walls, and into serous sacs, usually induces suppuration." He states also that "we must attribute much blame to the fact that in the pus-sacs the air is warmed, and impregnated with watery vapour from the pus; this inclosed air now becomes a true hatching-place for those minute organisms which cause decomposition, and which are always more or less present in the atmosphere."

AN ANTIPHLOGISTIC METHOD OF DRESSING OPERATION WOUNDS.

Mr. Jonathan Hutchinson *(Lancet)* has for some time past been employing a plan of dressing operation wounds which has been attended by unusually satisfactory results. Thus in three successive cases of excision of the breast the wound healed by first intention. In one of the best not quite the whole of the gland was taken away, but as a number of the glands were removed from the armpit the wound was of more than ordinary size. In this instance the woman left the hospital on the tenth day, with a sound linear cicatrix and in perfect health, there never having been any suppuration whatever. I have had many other cases of various kinds in which the results were nearly as good as this, the union being either literally by first intention or practically such.

The essential feature in the plan is to keep the parts cool by the systematic application of a lead and spirit lotion. The lotion consists of half an ounce of liquor plumbi, and an ounce and a half of spirit to the pint. An ample fold of lint wet in this is applied to the skin over and around the wound, and emphatic directions are given to the nurse to remoisten it every quarter of an hour, or every half hour, according to the rate at which it dries. The skin ought to become whitened by deposit of lead. The application is to be commenced from six to twelve hours after the operation, and from that date all bandages are to be put aside, and the lint kept simply laid upon the part. It is to be continued without intermission until the wound is perfectly sound—a week, or two weeks, as the case may be. It is very agreeable to the patient, and gives nobody any trouble, except the nurse. It is not desirable to wake the patient out of sleep, but during the night every suitable opportunity should be used for re-wetting the line. If the plan fails it will, in all probability, be from negligence in this matter.

The theory of the plan is, that, by keeping the parts cool and saturating the tissues with lead, inflammation is prevented. It appears to have no risks, except that if very thin skin-flaps have been left, it may be possible to over-cool them and cause gangrene. I have been in the habit of speaking of it as antiphlogistic, in contrast with antiseptic, but my friends have suggested that it is antiseptic as well.

Although the above is the chief point, yet there are other minor matters which are probably of some importance as conducive to success, and which, although they are all of them well known to operators, I may perhaps be excused for mentioning. No blood should be left in the wound, nor should there be any risk of bleeding. Far better wait an hour or two than put up a wound prematurely. A drainage tube left in the most depending part of the wound is usually a safe precaution. In the case of removal of a breast I always make a counter opening at the most depending part and put the drainage tube through this. It should be removed on the third day. I have no fear of either sutures or ligatures, but always tie with silk every bleeding vessel, and coapt the edges very carefully with numerous stitches. Great care should be taken that none of the latter are tight, and they should all be taken out on the third or fourth day. If the wound be prevented from inflaming there will be no suppuration about either sutures or ligatures, and often these will remain perfectly dry. After the sutures, strips of plaster, with narrow intervals, should be carefully applied, and these should remain on for five or six days. Over the plaster I always apply a lint compress wet with the lotion, over this a mass of cotton wool, which is kept in place pretty tightly by a flannel bandage. This is applied to prevent oozing, and, as already said, is to be taken quite away in from six to twelve hours.

Of course if there is any tension on the edges of the wound, union by first intention can scarcely be hoped for, and every endeavor should be made to secure easy coaptation. If it be a

matter of necessity to leave part of the wound open, the lead lotion may be still used, and is yet more necessary. I have never witnessed any ill results from absorption of lead, and I feel confident that in many cases of open wounds so treated diffuse inflammation has been prevented.

If, in spite of precaution, blood clot has accumulated in the wound, or if suppuration has occurred, then at once cut the sutures freely and re-open the wound. Syringe the wound out or not, as may seem desirable, but on no account desist from the lead lotion.—*The Monthly Abstract of Med. Science.*

TREATMENT OF JOINTS BY SULPHURIC ACID.

It is now more than five and a half years since Mr. Pollock first directed the attention of the profession to the beneficial effects produced by sulphuric acid in the treatment of caries and necrosis. Mr. Pollock there states that he was led to try the acid as a solvent of diseased bone by having under his care a very aggravated case of syphilitic necrosis of the skull, in which, from the conditions, he was averse to any instrumental interference for the removal of the diseased portions, but in which it was clear that a very long period must elapse before exfoliation could take place, if nature was unassisted by the surgeon. Subsequently, in 1865 and following years, he employed it in other cases of syphilitic necrosis of the bones of the skull, syphilitic necrosis of the tibia, and necrosis of the tibia after fracture, also for the destruction of carious surfaces in cavities of bones and of patches on the surface of deep-seated (*e.g.*, the pelvic) bones. The mode in which the acid is employed is two-fold—either to touch the diseased bone with a glass brush or rod dipped in the strong acid; or to use a mixture of acid and water in equal parts, or in the proportion of one part of acid to two, three, or six parts of water, and either syringe it into the cavity of the bone, or place some lint, soaked in the lotion, upon the surface of the necrosed portion.

In no one of a large number of cases treated in this way at St. George's Hospital, and in private practice, had any evil consequences been known to follow the application of the acid to diseased bone of any part of the body, nor had the remedy been found a painful one; and when the acid has been used diluted it has not caused uneasiness to or irritation of the soft tissues. The antiseptic qualities of the acid favour its use, for, by altering the character of the foul discharges which so often accompany diseased bone, it puts a stop to all disagreeable smell. Hence, it is a valuable agent in necrosis of the joint, because it modifies the fetor which affects the breath of patients so afflicted. While inclining to the opinion that the early application of sulphuric acid rather tends to check the spread of caries and necrosis, Mr. Pollock remarks,—"The real merits of the treatment lie in the limitation of the action of the acid to the diseased bone, in the perfect safety of the application, and in the fact that it produces no irritation of the soft parts." Since the publication of that paper the experience of the acid at St. George's has been a good deal extended, and it has been, and still is, very freely and fully applied by Mr. Pollock in all cases of caries, and in necrosis where operation by instruments is not considered desirable—as in necrosis of the skull. The method of its application has continued to be by means of lint soaked in the solution, or the fluid has been introduced by means of a glass tube or bottle. The excellent results following from the application of the acid to carious bone surfaces have been so obvious to those who have had many opportunities of witnessing them, that Mr. Warrington Haward, in 1871, was led to try its effects upon the carious articular ends of the bones, and the suppurating synovial membrane of the knee-joint, in a child under his care in the Branch Hospital for Sick Children at Highgate. The constitutional disturbance was scarcely, if at all, increased by the operation; the pain and amount of discharge rapidly diminished, and the patient's health quickly improved. At the end of five months, the child was going about with a firmly anchylosed joint. The success in this instance encouraged a repetition of the treatment in others of a similar nature, and during the last four years Mr. Haward has treated as many as ten cases

of diseased joints by the local application of the acid. Mr. Pollock has employed it for strumous affections of the ankle and wrist-joints, complicated or not with caries, and he has also used it for strumous disease of the knee-joint. Since Mr. Haward's first case, at St. George's, Mr. Holmes and Mr. Rouse have also tried it on the knee-joint. The plan adopted is to lay open the joint freely and clear it out by passing strips of dry lint through it, so as to get rid of the coating of lymph and pus; then the joint is filled with lint soaked in a solution of sulphuric acid (one part of strong acid to two of water). By this means the pulpy synovial tissue is destroyed, and so also are the cartilage and the carious layer (if existing) on the articular surfaces of the bones. As a rule, the application is followed in a few days by a slough of the surfaces, and parchment-like fragments come away through the openings into the joint. Both Mr. Pollock and Mr. Haward consider that when a joint is suppurating the amount of pus is at once lessened by the local application, while it is seldom that any serious constitutional or local disturbance is produced by it. In fact, the acid converts an unhealthy, pus-secreting surface very rapidly into a healthy, granulating one, and in a very short time it appears to relieve constitutional irritation. The advantages of the treatment, when successful, over excision are considerable; in the first place, it is a less formidable operation; secondly, it does not tend to shorten the limb, as excision necessarily does; and thirdly, it allows of anchylosis in a slightly flexed position — a point upon which Mr. Pollock lays considerable stress. Mr. Calloway demonstrated years ago, in his own person, the inconvenience of anchylosis of the knee in the perfectly straight position. He was in the habit of showing that he could go up stairs only with great difficulty with his perfectly straight limb, and he believed that a slight amount of flexion would have been much better. Of the experience afforded by Mr. Calloway's case, advantage has been taken by Mr. Cooper Foster and other of the surgeons of Guy's Hospital, who endeavour to obtain anchylosis of the knee in a position of slight flexion. When the treatment is unsuccessful, it in no way prevents excision from being afterwards performed. The cases which seem most suitable to be thus treated are those in which the disease has had its origin in chronic synovitis, and gone on to ulceration of the cartilages, with perhaps superficial caries of the bones; whereas, the cases which are ill adapted are those in which the bone is very extensively diseased,—*i.e.*, diseased beyond the articular extremities, and at a distance beyond which the acid cannot reach.—*Med. Times and Gazette.*

NITRITE OF AMYL IN ACUTE TETANUS.

In a fatal case of acute tetanus after crushed fingers treated by Mr. Wagstaffe (*British Med. Journ.*, Oct. 23, 1875) at the St. Thomas's Hospital, with nitrite of amyl, the symptoms were very acute, and it was evident that only temporary relief was given by the treatment. Still the effect of the nitrite of amyl is worthy of record. The most distressing symptom from the first was the difficulty of swallowing, and this, together with the spasm of different muscles, was not in the least relieved by chloral; but it was evident that the influence of the amyl-nitrite was for a time beneficial. One minim was administered by the mouth, at first every half hour with the effect of diminishing the spasms, so that he was able to swallow with comfort. The dose was increased after two hours to two minims, and then to two minims every quarter of an hour, sometimes inhaled and sometimes swallowed, and, after about two hours, was reduced to one minum every half hour. During all this time, the spasms had almost disappeared; but very marked lividity came on with a spasm, which carried him off. It is difficult to say to what extent the amyl induced this lividity, or whether the cause of death was simply referable to the disease; for, as is well known, cases of tetanus frequently terminate with the symptoms which here existed. But it appeared as if the drug greatly diminished the most distressing symptoms. The *post-mortem* appearances did not throw much light upon the question.—*The Monthly Abstract of Medical Science*, December, 1875.

CHLORAL AS A LOCAL APPLICATION FOR ULCERS.

On visiting the wards of Guy's Hospital on the 7th of October, we saw several patients on whom a solution of hydrate of chloral had been used as local application to ulcers, and the results appear to be sufficiently satisfactory to be worthy of record. Mr. Lucas commenced the use of chloral among his out-patients in August last, for cases of sloughing wounds and fetid ulcers, and being pleased with the result, he has since given it a somewhat extensive trial in the wards. The effect of the local application of chloral appears to be that of a powerful stimulant and disinfectant; it has no soothing or sedative effect upon the part to which it is applied, but, on the contrary, gives rise to considerable pain, which lasts some time; nor does it, even when used over a very extensive surface, ever become absorbed in sufficient quantity to act as an hypnotic. Whether it is taken up into the circulation or not matters little, since the quantity used as a local application is so small compared with the dose administered as an internal remedy, that, were the whole of the drug applied to find its way into the blood, the quantity absorbed would still be very much less than that of an ordinary sleeping-draught. Its local application is, therefore, eminently safe and free from the dangers which sometimes follow the use of opium lotion or carbolic lotions long continued. Mr. Lucas has used solutions of various strengths, that which he has found most useful being a solution of four grains of hydrate of chloral in an ounce of water. The application of a lotion of this strength is, as we have just stated, often attended with considerable smarting which may last a quarter of an hour, but the smarting becomes less at each subsequent application. In cases where the patients have complained much of the smarting, the lotion has been diluted to the proportion of three or two grains to the ounce. The treatment of foul sloughing ulcers by means of chloral lotion has been attended with great success, the surface of the sore quickly cleansing and assuming a healthy appearance, whilst the subsequent healing has advanced with rapidity in some cases quite astonishing.—*Medical News and Library, Dec.* 1875.

EXCISION OF THE HIP-JOINT.

Mr. Annandale gives, in the *Edinburgh Medical Journal*, the opinions of a large number of surgeons on the propriety of excision, and then summarises them as follows.—

"1. That when suppuration and disorganization of the textures of the hip joint continue unrelieved by ordinary treatment, excision of the head of the femur is a proper and justifiable proceeding, if the patient's health is in a fair condition.

"2. That the operation is more successful in children than in adults.

"3. That in successful cases the limb and joint are more useful than after a natural cure.

"4. That superficial or limited acetabular disease does not interfere with the performance and good result of excision of the head of the femur.

"5. That even when the acetabulum is much involved, or pelvic suppuration exists, it is important to afford a free escape to the pus by the removal of the head, neck, and great trochanter.

"6. That when the acetabulum is extensively diseased, it, together with the head and neck of the femur, should be removed, if the patient's condition admits of the operation.

"7. That it has not yet been accurately determined what is the earliest stage in which the operation is justifiable, although most agree that hitherto the operation has generally been delayed too long.

"Amputation at the hip-joint is justifiable only in cases where the femur is extensively diseased, or the soft textures of the thigh much destroyed by ulceration, sloughing, or the results of suppuration, or where excision has failed, and amputation seems to give a chance of life."

[Several cases are also recorded to illustrate the above propositions.]

Another recent death from chloroform has occurred in England, the patient being a man, aged forty-two, and said to have been perfectly healthy up to the time of the operation for extirpation of the eyeball. After inhalation of about a drachm and a half the pulse failed, and all means were tried in vain to restore animation.

New Method of Treating Varicose Veins.—M. Rigaud, Prof. at the School of Medicine at Nancy, lately brought to the notice of the Surgical Society at Paris a new method of treating varicose veins. For nearly a quarter of a century, M. Rigaud practised cauterization with the Vienna paste, with the view of producing obliteration of the vein, and obtained a fair amount of success. He noticed, however, that, on exposing the vein in order to apply the caustic, the vein contracted to nearly half its diameter, and at the same time the external coat seemed to thicken and lose its transparency. This applied of course to all the vessels exposed to the air, and from it he argued that if such an effect is produced by simple contact with the air, it would be superfluous to apply any other remedy. He accordingly treated a certain number of cases in this way: after cutting down upon the vein, he isolated it from the surrounding tissue by passing a bit of tape or adhesive plaster around it, and thus left it exposed to the air. About the seventh day the vein becomes completely dry and obliterated; this portion then separates from the rest of the vein, and the wound in the skin, caused by the surgeon, heals rapidly. It sometimes happens that the rupture of the veins does not take place, but they are transformed into a mass of fibrous tissue. M. Rigaud performed the operation 151 times; 140 on the lower extremities, and 11 for varicocele. The immediate result had been so far a success that the veins were completely obliterated, but, unfortunately, he could not say whether in all the cases the cure was permanent. In 15, however, of those he had seen sometime after, and on whom he had operated on the lower extremities, the cure was radical and definite; but, in seven of these cases M. Rigaud observed the developement of new varicose dilation of the collateral branches as well as of the superficial veins of the skin.—*Med. News and Library.*

The Princess Imperial of Brazil, Comtesse d'Eu, was recently delivered of a son by Cæsarian section. The child is heir to the throne of Brazil.

Midwifery.

TWO CASES OF INTERMITTENT UTERINE POLYPI—ABLATION—CURE.

BY PROFESSOR PAJOT.

A lady, forty years of age, healthy and regular, mother of two children, consulted me because her courses, though regular, as she said, became more and more abundant, and she lost large clots. She told me she felt something descend low enough to be occasionally touched when she washed the genitals. I thought little at first of this foreign body, and regarded it as one of those elongations of the labia minora, a common vice of conformation, which disturbs certain fashionable ladies. I examined this lady, and found that the vagina was occupied by a foreign body, soft enough on its surface, but containing a kernal as hard as an unimpregnated uterus. I could feel with the forefinger a pedicle as large as a goosequill, which penetrated within the neck. I cautiously applied the speculum, taking care to make the foreign body enter the instrument, and the sight verified what the touch had discovered. There was a polypus like a bell-clapper of the size of a nut implanted probably in the neck, but certainly penetrating it. Nothing was easier than relieving the patient. For prudence sake, I chose the day of operation at a time intermediate between two menstrual epochs. I recollected two facts cited by Velpeau at least twenty years ago which struck me forcibly. Small polypi severed without precautions caused death by hemorrhage. At the appointed day I went to the patient. Everything was prepared, a large speculum introduced, but no polypus was found in the vagina. I saw its anterior surface jutting out of the orifice of the os, and seizing it by forceps, gently drew it; it resisted and appeared to be much firmer than formerly when the patient came to me after menstruation. I thought it prudent to vary the operation, and told the patient to send for me when she felt it, which was ten days afterwards. This time it was out of the neck, though less than at the first examination, and the pedicle was accessible. I applied a loop of iron wire, and cut

the pedicle as long as possible with a small écraseur. I touched the cut surface with perchloride of iron, and washed the vagina. Not a drop of blood was lost. The courses appeared four days after. They were less abundant, but more painful than usual. After their cessation the patient was completely cured.

I must add one particular, the most interesting of this observation. The patient had been seen by two provincial doctors, and by one of the most celebrated specialists of Paris. Neither of them had the chance to fall on the day of egress of the polypus, and one of our most eminent brethren had assured this lady that she had nothing at all except in the imagination, the patient being an intelligent, educated, and impressionable woman.

A dozen years ago a lady, forty-five years of age, wife of a provincial magistrate, presented almost an identical case, except that the polypus was smaller, like a cherry, red, and had given rise to considerable hemorrhages. I crushed it, and cauterized with acid nitrate of mercury. The result was good. This polypus had also been mistaken by several practitioners. These two cases are the only ones of the kind I have met with in my practice. Doubtless they are not excessively rare, but this kind of tumour has not appeared to me common enough to be wanting in interest, above all, having regard to the errors they give rise to.—*Gaz. Obstetricale.*

Turning in Pelves Narrowed in the Conjugate Diameter.—The *American Journal of Obstetrics* contains a learned paper on this subject by Dr. Wm. Goodell, concluding with the following propositions :—

"1. Turning should generally be preferred to the lashing of the forceps handles.

"2. In pelves uniformly contracted the forceps is the better means of delivery.

"3. In pelves narrowed in the conjugate diameter, turning should be resorted to whenever a half-hour's faithful trial with the forceps fails to make the head engage.

"4. In pelves whose conjugates range from 2·75 to 3·25 inches, turning should be the initial step." — *American Journal of Medical Science.*

TREATMENT OF PROLAPSUS ANI IN CHILDREN.

In the "Report on Midwifery and Diseases of women and children," published in the Oct. (1874) number of the *Review*, there was a reference to the use of the actual cautery in prolapse of the rectum in young children proposed by M. Panas, respecting which Dr. Lorigiola has kindly addressed a letter to the reporter expressing his astonishment at the use of the actual cautery in this affection, and recommending the subcutaneous injection of a solution of strychnine into the tissues near the anus.

Dr. Lorigiola says he has for a long time used with great success a solution of sulphate of strychnia, and that he has thus treated six cases, none of which required more than two injections.

The quantity required for each injection is from four to twenty drops, according to age. The learned Doctor says that the operation is painless and is never followed by poisonous effects. Converted into English equivalents, his solution will represent *one grain and four-fifths* of sulphate of strychnia and *three drachms* of water.

Baron Von Langenbeck has obtained excellent results from a less dangerous drug than strychnine, which cannot be regarded as quite devoid of risk when injected subcutaneously. Baron Von Langenbeck, in a communication on the employment of ergotine in surgery, states that he has successfully used ergotine in cases of procidentia, invagination, or intussusception of the rectum. The solution is injected into the perirectal tissue.

This method of treatment is certainly worthy of trial in a disorder so troublesome as prolapsus ani. — *British and Foreign Medico-Chir. Review.*

Chloral as an Anodyne in Labour.—Dr. Chiarleoni confirms the statements made by Dr. Playfair and others in this country and abroad, that chloral lessens the pain of child-birth, and he believes it promotes uterine action. He thinks it especially advisable in uræmic convulsions.—*British and Foreign Medico Chir. Review.*

ON THE PROBABLE ORIGIN AND DIFFUSION OF PUERPERAL FEVER.

At a meeting of the Middle-henish Medical Association, held at Worms, a paper was communicated by Dr. B. I. Krauss of Bensheim (Hesse), giving an account of an outbreak of puerperal fever at Reichenbach. Eight lying-in women out of ten who were affected by it died. The epidemic appears to have arisen in the following way. The midwife of the place was suffering from erysipelas of the head, and desquamating at the time when she was called to attend a woman in labour. This woman had been in good health during her pregnancy, and had a good time. On the 3rd day she had a high fever, the so-called erysipelas pulse (140 beats in a minute), great pain, and distension of the abdomen: she died the following day. The same widwife delivered eight women during that month, and another at the beginning of the next: seven of these died, and two recovered after a long illness. Four newborn children were attacked by erysipelas, of whom two died. During the same time erysipelas was prevalent in Reichenbach and the neighbourhood. In Reichenbach itself eight persons had erysipelas of the head, of whom two died. Dr. Krauss supposed that the first woman was infected by the midwife and puerperal fever resulted, which was then conveyed by the same midwife to the women she afterwards attended. The intimate connection between erysipelas and puerperal septic disease had been long known. But the author of the paper thought it would be well if midwives were instructed as to the danger to which they exposed women, when attending them under such circumstances, and that they should take proper care to disinfect their clothes, &c.—*Archiv für Gynæk.*

Emphysematous Cysts of the Vaginal Mucous Membrane.—These crepitating tumours have been observed by Prof. Braun and by Winkel in the vagina, but Prof. K. Schrœder was the first to discover emphysematous cysts in the vaginal mucous membrane; he removed two small tumours from this membrane, and by opening them under water ascertained that they contained a gas. In Schmidt's "Iahrbuch," Dr. Kormann states his belief that these tumours are follicular cysts from whose serous contents gas was developed.

ATROPHY OF THE OPTIC DISC FOLLOWING POST PARTUM HEMORRHAGE.

Dr. A. Friedenwald was called to a lady in confinement last March; labor prolonged on account of rigidity of the os, which compelled him to stay with her all night. At 5 o'clock the next morning dilatation was complete, but the pains had ceased, when he accomplished a speedy delivery with the forceps, and left her at 7 A.M,, doing well. Had been home but a short time when he was hastily recalled, and found that hemorrhage had taken place. He turned out the coagula, gave ergot and left her improved. She recovered rapidly and was sitting up on the eighth day. That afternoon she was taken with a chill and return of the hemorrhage; found her with a blanched countenance and nearly pulseless. This time rccovery did not take place so rapidly as on the former occasion. She was greatly weakened and complained of headache, giddiness and dimness of vision. On the fourth day after the second hemorrhage, profuse perspiration ensued, which seemed to prostrate her even more than the floodings. The disturbance of vision was now still more decided, the defect assuming both the characters of contraction of the field of vision and diminution of acuteness of vision. Notwithstanding a free use of quinia and iron, she remained for a long time prostrated and anæmic. The right eye recovered, but the other is totally lost. An ophthalmoscopic examination of the lost eye shows paleness of the fundus, attenuation of the retinal vessels and contraction of the optic nerve. This form of trouble is not unusual in puerperal mania, but the patient generally recovers, while in this case permanent impairment of vision resulted.—*Virginia Med. Monthly.*

CASE OF SPONTANEOUS SALIVATION ASSOCIATED WITH PREGNANCY.

BY A. FARR, M.D.

The mother of four children pregnant, for the fifth time, suffered from such excessive salivation that it was considered necessary to propose the induction of premature labour. The symptoms, however, suddenly abated upon the occurrence of quickening, and the patient speedily regained strength and required no further medical treatment.—*Obs. Journal.*

PREGNANCY AND LABOUR IN EPILEPTIC WOMEN.

The following are the conclusions arrived at by Dr. Parry, in his paper on the above subject published in the *American Journal of Obstetrics* for August, 1875.

"1. Epileptics rarely have convulsions during labour. They are not more liable to puerperal convulsions than healthy women. Labour in them is, as a rule, not more unfavourable than in healthy women.

"2. In exceptional cases in which violent epileptic convulsions occur during labour, it is not decided whether it is best to hasten delivery or to trust to nature.

"3. Pregnancy may be the immediate cause of epilepsy. In these cases fits rarely occur during labour, and the disease is immediately arrested by parturition, but it will almost always reappear whenever the woman becomes pregnant.

"4. Either form of epilepsy may result in the death of the fœtus, but convulsions of this kind are not as likely to destroy the child as those which may be correctly designated puerperal."

A New Antipruritic Remedy.

Dr. L. D. Bulkley recommends the following prescription for the relief of pruritus senilis, anomalous cases of pruritus, itching of chronic papular eczema or lichen, of pregnancy, pruritus vulvæ, pruritus hiemialis lately described by Dr. Duhring of Philadelphia: R Pulv. Gummi Camphoræ, Chloral Hydrat āā ʒi; Ung: Aquæ Rosæ ʒi. M. Rub the Chloral and Camphor carefully together till a fluid results; then add slowly the ointment. "This, when applied," he says, "to the healthy skin produces no effect, but possesses great power in arresting itching without overstimulating the parts. It does not answer when the skin is at all broken; it is then necessary to employ other less irritating agents, but the burning sensation caused on its first application lasts but a few moments, when the relief occasioned I have known to last for hours, or even a whole day. The ointment loses strength on standing exposed, and should be made fresh very frequently."—*American Journal of Medical Science.*

Materia Medica.

ON CROTON-CHLORAL HYDRATE.

In the *Medical Press and Circular* Dr. J. C. O. Will says:—

I may state my decided conviction that of all hypnotics, croton-chloral has the least troublesome sequelæ.

I make it into a syrup containing two grains of croton-chloral to a drachm of a mixture of glycerine and syrup of orange flowers, colored by adding a very minute quantity of tincture of cochineal. This effectually conceals the taste of the drug, which is certainly to be desired, as it seems to me decidedly unpleasant, and when taken without some flavoring agent it leaves a disagreeable, semi-acid taste in the mouth for a considerable period after swallowing it. This preparation is permanent, a matter of considerable moment, as croton-chloral, though rather freely soluble in warm fluids, is only sparingly so in cold, and when first employing it I was disappointed to find that a mixture which was perfectly clear when first made, soon after became clouded, and threw down a copious deposit of crystals on becoming quite cold. It is, as stated by Wallich and Diehl, freely soluble in alcohol, and a strong tincture can thus be prepared; but, fortunately, on the addition of water, separation soon takes place, the liquid first presenting an oily-like appearance, and soon after depositing crystals. Therefore, if a strong spirituous solution is prescribed, directions must be given that water, in the proportion of at least a drachm to each two grains of the croton-chloral, should be added before the dose is taken, else the changes I have indicated will ensue, and some of the crystals are pretty sure to adhere to the spoon or glass, or to remain in the patient's mouth, an occurrence certainly not desirable, as the taste of the pure croton-chloral is far from agreeable.

Case 1.—Mrs. T., æt. 30, suffering from severe facial neuralgia, occurring every night about ten o'clock, was ordered three grains of croton-chloral; half an hour after the pain disappeared, and she slept well, which she had not done for some nights before. On the four following nights the pain recurred at the same

hour; three grains were again taken, with similar effect. On the sixth night pain not nearly so severe. On the seventh still less so, after which it did not return. On asking the patient if the mixture made her sleepy, she replied, "No, the pain left me, and then I soon went to sleep." At the time when this statement was made to me I had not seen Liebreich's paper on croton-chloral, but I have since found that it is in accordance with his experience, viz., "that in some cases of tic douloureux the remarkable phenomenon is exhibited that pain ceases before sleep sets in."

Case 2.—Mrs. S., æt. 43, a somewhat hysterical female, suffering from supra-orbital neuralgia, appearing every night about eleven o'clock. To take $2\frac{1}{2}$ grains on appearance of pain, to be repeated in two hours if necessary. Soon after the first dose pain abated considerably; after the second it disappeared entirely, and did not return for some nights; when it did, the medicine again acted as on the former occasion.

Case 3.—Mrs. W., æt. 31, had been for some days attacked by intense pain in her right temple, commencing soon after she arose from bed, and continuing with more or less severity during the greater part of each day. When I was called to her it was more severe than it had ever been before. She was directed to take three grains every second hour till relieved. Six grains sufficed, and when I visited her on the forenoon of the following day she was quite free from pain, and said that soon after the second dose she felt so well that she had been able to serve her customers "just as if nothing had ever been the matter." In this case the truth of Liebreich's statement, already alluded to, was well affirmed.—*Canada Medical Record.*

Jaborandi.

Dr. Ambrosoli of Lombardy comes to the following conclusions after numerous trials of this drug.—

1. It is of importance to establish which of the many varieties it is that possesses sudorific and sialagogue properties; for it is because the variety of the plant which really possesses active properties has not been specified that it has come to pass that different experimenters have not obtained the same results.

2. An infusion of five or six grammes in water, drunk either cold or tepid, the patient being in bed and warmly covered up, produces in from fifteen to twenty minutes, and rarely after one or two hours, a profuse sweating over the whole body which is prolonged from four to fourteen hours, and which may be renewed on successive days without an additional dose having been taken.

3. There generally occurs, half an hour or an hour after taking the Jaborandi, an abundant viscous, ropy salivation, which by the reason of the large quantity of liquid with which it fills the mouth impedes speech.

4. From one to two hours after the commencement of the administration the pulse and respiration diminish in frequency, and the temperature may become lowered by even four degrees (centigrade) — *Medical Times and Gazette.*

To Preserve Solutions of Morphia.—It is asserted by M. Vidal that the addition of chloral to a solution of morphia renders it much less liable to spontaneous change. This fact, if it be true, is important. The alteration which concentrated solutions of morphia undergo renders their strength variable and uncertain if they are laid by for a time. M. Vidal adds to the solution a quantity of chloral equivalent to twice the weight of the morphia it contains. He affirms that the injection of this mixture is not painful.—*Lancet.*

Tincture of Iron in Rheumatism.—Dr. J. Russell Reynolds, in a recent lecture, speaks very favorably of this drug in acute rheumatism. From 15 minims to a drachm every four hours produced no discomfort of any kind, and although a number of cases sufficient to establish a therapeutic position had not been treated, yet the results, so far, are sufficiently significant to warrant a further trial of a mode of treatment which is certainly better than that which Warren said was all that he knew of that was good for rheumatism, viz., six weeks.—*Med. and Surg. Reporter.*

Gangrene; Treatment with Salicylic Acid.—Dr. N. G. McMaster has used this acid as an application to gangrenous surfaces, with marked benefit in keeping down the intolerable odor. One case, particularly, was satisfactorily treated in this way. Bromine had first been applied, then carbolic acid, then poultices of charcoal, but the odor was, nevertheless, sufficient to exclude the patients from the ward. The salicylic acid in powder was then either dusted on the surface or blown into cavities, as necessity indicated. After the thorough use of this agent the offensive odor was completely controlled.

Hot Packing in Acute Rheumatism.—This mode of treatment has been adopted in Mount Sinai Hospital, and apparently with marked benefit. It consists in packing the patient with blankets wrung out of hot water, and changed as often as their temperature falls. In one case, where the disease had invaded every joint, the patient was relieved in eight hours. The rheumatism shows a tendency to recur, and when it does the packing is practised as at first. Local packings are also used with benefit. The results obtained are fully equal to those obtained from cold packings and the use of ice, and have the advantage of not shocking the feelings of the patient's friends.—*New York Med. Journal.*

Prophylactic in Cholera Infantum.—The numerous cases of gastro-intestinal catarrh occurring in small children during summer preponderate among such as are fed with the the bottle. The various kinds of treatment adopted by physicians have not proved very successful, hence a prophylactic against this disease is of great value. As the affection originates in the nourishment of the infant, Jacusiel *(Berl. k. Wochenschrift*, 1875) has been led to add two tablespoonfuls of a one-third per cent. solution of salicylic acid in water to the daily allowance of milk, with the effect of rendering the germ of the disease powerless. The children fed in this manner have not had gastro-intestinal catarrh, or suffered any inconvenience from this rather free use of salicylic acid. The remedy is harmless and also inexpensive.—*Hospstal-Tidente* September, 1875.

Alcohol as Medicine.—A difficult question in medical casuistry was suggested the other day at an inquest held by Dr. Diplock. An infant died under the following circumstances. After two days' illness, during which only some medicine from a chemist had been administered, Dr. Woolrych was sent for, who found the child suffering from acute lung affection, and ordered that the child should have brandy and milk. The father refused to give the child brandy; he was a total abstainer, and did not believe that it would do any good. Dr. Woolrych then declined to attend the case. Another medical man was sent for, but before he arrived the child was dead. Dr. Woolrych was asked by the coroner whether he suggested any other stimulant, such as ether or chloroform, and replied that he did not. It is impossible to say that brandy in this case would have saved the child's life; indeed it is obvious that the child was already past hope. Accordingly an open verdict was returned. The wider question, however, is raised—Is a medical man justified in withdrawing from a case in which his directions as to the administration of stimulants are openly repudiated? Ought he to refuse his help, or should he endeavor to replace the obnoxious brandy by other stimulants,—ammonia, ether, chloroform? It is doubtful how far these stimulants can take the place of brandy. Their effect is different; their action produces other secondary consequences more delcterious than those of ethylic alcohol. They cannot be substituted for wine or brandy. They may supplement, but cannot replace the latter. A case could not be treated on such conditions without deliberately accepting an inferior vantage ground for the contest with disease. It is certainly a course more consistent with self-respect, more consistent with due regard for the wider interests of humanity, to decline to undertake the treatment of disease weighted with such needless and prejudicial conditions. It may be suggested that the difficulty might be, in many cases, overcome by administering alcohol under the guise of physic. But this is a deliberate deceit, and it would be better to decline the management of a case on such terms, and to allow the responsibility of the results to rest where it is deliberately assumed.—*London Lancet, Dec.* 18, 1875.

THE CANADIAN

Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, FEBRUARY, 1876.

TORONTO GENERAL HOSPITAL.

WE have received a copy of a Bill introduced by the Hon. Mr. Crooks to amend the Acts relating to the Toronto General Hospital, and would like to know what grudge the author has against the Hospital and the Medical Profession, by which he was prompted to draft a measure so subversive of the usefulness of the former, and so fraught with insult to the latter.

Clause 1 provides for the appointment of five trustees—three by the Government, one by the City Council, and one by subscribers of ten dollars and upwards to the funds of the hospital. We do not see why a subscriber of four dollars is not just as capable of making a discreet choice as one of ten dollars; but the author of the Bill thinks differently. Then we would like to know why Medical Practitioners, in practice, should be specially ostracised by an Act of Parliament, which makes it unlawful for the City Council to select one of them as their representative.

Clause 2 declares that all the trustees shall be appointed annually, in the first week of December. We have known trustees who were diffident enough to feel that it took months to familiarize themselves with the workings and wants of the Institution, but we suppose the author is a believer in heaven-born trustees who, Minerva-like, need no such pupilage. Still, we believe it will be a great mistake to have all the appointments made annually.

Clause 3 provides for the disposal of subscribers' contributions, and gives every annual subscriber of $150 the right to "nominate one sick person, not afflicted with infectious disease, to fill a free bed, and to any vacancy occurring therein during the said year;" whatever that may mean.

Clause 4 authorizes the trustees "to appoint a Medical staff of twelve persons, to hold their positions at the pleasure of the trustees, but *to terminate* on the 30th day of June in each year." Notwithstanding the ambiguity of this clause, it evidently provides for a general scramble every year among those (if any there be) who desire the precarious honor.

We believe, however, that few Medical men with any degree of self-respect, unless compelled by the exigencies of their connection with the Medical Schools, will care to engage in the general strife which this annual appointment entails, and certainly fewer still will care to engage in the labour of preparation for clinical teaching on so short a tenure.

It is true, "any of the said staff *may be* re-appointed," but if others more active or obsequious should enter the lists, they *may not*.

But of all the absurdities we have ever met with in Acts of Parliament, we think the climax has been reached in the fifth clause, which, after providing for the appointment of a consulting staff, empowers the trustees to pass by-laws "for regulating matters and routine relating to medical treatment."

In our simplicity we supposed the Medical Staff should regulate these things, but lo! a Daniel cometh to judgment, and our heaven-born trustee knoweth best when Tom should have salts and Bridget tansy tea. This clause also says, "where a paying patient is received into the hospital, the trustees may allow such patient to be attended by a duly qualified Medical practitioner resident in Toronto, although not one of the Medical staff of the hospital," but why not from the country as well? Now, inasmuch as a large proportion of the inmates first go in as paying patients, it follows that in a short time *all the Medical men* of the city may be in attendance at the hospital affecting its reputation, but without any of the responsibilities of its staff; and as no provision is made to enforce clinical teaching by those who are not members of the staff, and as

the necessary material to furnish clinical instruction is distributed among so many different attendants, the usefulness of the hospital in this respect will be entirely and completely destroyed.

But surely no House with so large a representation of Medical men as the Ontario Legislature, will make itself the laughing-stock of the world by allowing so crude, ridiculous, and suicidal a measure to become law.

JUDGING from the way our JOURNAL has been received, no apology seems necessary for its appearance. Our most sanguine friends could not have wished or anticipated a more hearty reception than has been accorded the CANADIAN JOURNAL OF MEDICAL SCIENCE, and if any additional incentive were requisite to induce us to put forth every energy to make the JOURNAL worthy of the profession to whose advancement we hope it will minister in some degree, that incentive has been furnished.

The field of Medical Journalism is common property, just as much as the field of medical practice; and inasmuch as we have always held it to be puerile in the highest degree to complain when other aspirants entered the latter field as competitors for public favour, we now step into the former, with a determination, if hard work and careful attention to the wants of the profession will enable us, to secure a share of the honours there bestowed, and make the CANADIAN JOURNAL OF MEDICAL SCIENCE respected and sought for, wherever its merits become known.

While we solicit the support and patronage of our medical friends everywhere, we expect to give them far more than a *quid pro quo* for their annual subscription.

We have set before us a high mark, and if we fail to accomplish the whole task, it shall not be for lack of good honest endeavour and persevering industry.

We are determined to discountenance all personal controversy among the brethren and with cotemporaries, as we think our pages can be filled with matter far more profitable to our readers.

We intend to hold an even balance between the different parties, schools, and sects, in the province of Ontario, and shall not willingly become the organ of any one of them to the prejudice of others. Our position shall be one of absolute independence and neutrality throughout, and if by oversight, or error of judgment, aught appears in our columns savouring of partiality, it will only have to be pointed out to be rectified.

Like all fallible beings we may err occasionally, but we consider it far more honourable and elevating to acknowledge error than to do injustice. On matters of public medical policy we shall not hesitate to speak; and if private individuals stand in the way of the public good they must expect to receive hard knocks. To the Medical Council as the regularly constituted executive of the profession, we will accord a generous support; but the *acts* of the Council we shall criticize with a fearless pen. The Council has done many things in the past deserving of censure, but it also has done a good work for the profession, and *we think a far better work* for the public, by establishing the high standard of professional attainments now required of all persons, seeking the license to practice, thereby securing a higher position for the profession abroad and greater safety for the public at home. It has demonstrated that what was cynically styled the "most anomalous Medical Act" in existence, could be worked satisfactorily for all parties, insomuch that we now hear of efforts being made in various parts of the world, even as far off as Australia, to enact laws similar to our much abused Ontario Act. An effort of the kind was also made recently in the state of Mississippi, where the bill, on the point of becoming law, was defeated by the influence of a certain planter, on the ground that an old "black mammy" would lose her livelihood, and the negroes her professional help.

We would remind the profession generally that the members of Council are our servants and responsible to us for the trusts they hold, and amenable to us for all their acts. Instead therefore of censuring the Council as a whole, let each elector scrutinize the votes and acts of his own representative, and call *him* strictly to account for anything disapproved of.

We also think it would be well if the profession could visit the meetings of their Council occasionally, and familiarise themselves with the way of doing business. The moral influence of their presence would no doubt be salutary.

Communications.

The following remarks form part of an editorial in the January number of the London *Lancet:*

"The most acceptable sort of communication is that which is based on numerous and well-observed clinical facts having a practical or therapeutical significance. We retain our strong faith in medicine—we mean in the administration of well-selected drugs. We are not converts to the mint-water treatment of acute rheumatism. If we have lately made fresh discoveries of the curative powers of nature, we have also made fresh discoveries of the curative powers of medicine. To go no further back than our impression of last week, can anything be more remarkable than the profound effects on the nervous system of Gelseminum sempervirens detailed by Dr. Sydney Ringer and Mr. William Murrell? Is it conceivable that such powers should not have applicability to the temporary aberrations of nerve-function which constitute so much of the disease that comes before us? Where is the justification of speaking disparagingly of medicine, when it reduces temperature; when it dilates a pupil or contracts it; when it removes pain as by a magical process; when it alters the complexion and the composition of the blood; when it modifies the capacity of the cavities of the heart and the calibre and the contents of the various tubes of the body, such as the bronchi or the bowels or the blood-vessels; when it removes nodes; when it stops hæmorrhage, or alters in twenty-four hours the whole aspect of a skin eruption; when it suspends indefinitely epileptic seizures; and when it induces sleep? When medicine can be shown palpably to have such powers, it is but reasonable to expect year by year the discovery of new uses of it in the treatment of disease. Accordingly we shall look with a kindly feeling on all communications with a therapeutical bearing. It is unnecessary to say that we want no hasty inferences or false conclusions It is easy to go wrong in estimating the therapeutical action of drugs; but of late the tendency to error has been rather in the direction of undervaluing medicines than of overestimating them. It is also superfluous to add that, as we should prize, most of all, communications showing modes of treatment that evidently curtail the duration of illness and the amount of pain, we should value as little inferior to these in importance papers which would show the fallacy of any accepted views or fashions of practice. We all fall more or less into routine modes of treatment, and no exercise is more beneficial to us as physicians than that we should be our own critics to test in all lights and ways the soundness of the conclusions we have arrived at and of the details of the treatment which we practise. Not the least advantage of such an attitude towards our own practice is that it makes practice so much more interesting. The most ordinary case of illness methodically studied—which, by the way, can be done with very little fuss or loss of time—becomes a lesson to us more instructive than mere books."

VACCINATION.—ITS EFFICACY.

BY GEO. WRIGHT, M.A., M.B., TORONTO.

This question has lately been the subject of considerable discussion, not only in the Old World, where the opponents of vaccination have been assuming a rather bold front in their resistance to the law, which compels its adoption at a certain date after the birth of every child, but in this country. That such opposition should occur to a limited extent, at least, is not surprising. As men are at present constituted, the unanimous acceptance of any principle the correctness of which admits of even the *shadow* of a doubt, would be a singular phenomenon. Vaccination as an expedient for the prevention of variola, or for the mitigation of its severity, has been on its trial for seventy-five years and upwards; and to the great mass of civilized society it has commended itself as worthy of all the importance attached to it. But Dr. George Gregory's prediction, "that, in proportion as small-pox subsided, and its terrors became less known, so vaccination would be less regarded as necessary, or, perhaps, might fall into disrepute," is just now receiving its fulfilment, not only in Europe, but in this country

to a limited extent. For many years after its introduction, very little doubt seems to have been entertained, either by the profession or the general public, regarding its efficacy as a protective. But as soon as the virulence of the disease had to a great extent subsided, and epidemics became both less frequent and less fatal in their consequences, some have very naturally been led to reason as to the cause, and to doubt the view that it is due to vaccination. Although the results of vaccination have been generally most salutary without inflicting any constitutional damage, the very nature of the expedient is such as to repel us from its acceptance, if we were not fully convinced of its great value. We naturally shrink from the deliberate infliction of suffering and indisposition such as occurs in the majority of cases of vaccination, and only dire necessity impels us to choose very much the less of two evils. None of us will deny that, if entirely persuaded that the necessity for vaccination had passed away with the very much less frequent occurrence of the disease against which it is generally believed to protect us, that its value had been vastly over-rated as a protective against small-pox, or that its adoption had been the occasion of introducing other diseases, not before existing, we would gravely consider the wisdom of abandoning it. I think, however, that the history of vaccination since its first acceptance in all countries does not by any means justify the conclusion that its discovery was not a great boon to society, and that the necessity for its adoption as a sanitary precaution is as urgent to-day as it ever was.

I purpose to examine some of the objections urged against vaccination, and if possible, ascertain whether or not they are entitled to the consideration claimed for them. The great objection is, that there is no substantial evidence that the principle has accomplished what is claimed for it; in other words, that it is of any value as a sanitary precaution. In support of this position Dr. Newman speaks as follows: "Vaccination *happened* to be introduced just "when the small-pox was on its decrease and "rapidly approaching the lowest point. People "jumped to the conclusion that vaccination was "the cause of the decrease. * * * We "do not, and cannot, trace the causes of epi- "demics, nor the causes of their cessation. "They generally die out without any such "checking influence as vaccination is supposed "to have exerted." This, in the most moderate terms, is a novel mode of arguing a question. It amounts just to this. Previously to vaccination, small-pox was a very prevalent, fatal and most loathsome disease; since the discovery and general adoption of vaccination epidemics have become both less frequent and less serious in their consequences. This decline is not due to vaccination, says Dr. Newman and his supporters, but to natural causes such as attach to all epidemics, but which cannot be explained. In other words, Dr. Newman admits that epidemics of small-pox have been very much less frequent and disastrous than before the discovery of vaccination; but he is unwilling to ascribe to it any of the credit. In the absence even of positive evidence of the fallacy of this position, it does not reflect any great credit upon its advocates. We have no right to presume that, because any disease has declined since the adoption of an expedient having in view such decline, the same result would have occurred without such expedient. If we were to adopt such line of argument against sanitary measures in general, we might repudiate many which are now acknowledged to be most effective and desirable. We might as well say, for instance, that, on the supposition that typhoid fever is due to defective sewerage, or to the existence of animal or vegetable poison in drinking water, still the removal of these agencies would not mitigate the virulence or lessen the frequency of the disease, as it would decline of its own accord. The facts in both cases are, in our judgment, alike conclusive.

Now, fortunately for the interests of society, the value of vaccination as a remedial agent against the prevalence and virulence of small-pox, has not been so generally accepted without the exercise of the greatest caution on the part of its advocates. When Jenner first presented it to the public in England, it was regarded as a most inhuman and irrational principle; and it was not until after the most conclusive proof of its efficacy had been presented, that it was finally accepted. No man of science ever had

to endure more odium or to brave a greater torrent of abuse, not only from his medical confreres, but from society at large, than had Jenner, before the final triumph of his wonderful discovery.

The statement is made that the adoption of vaccination has resulted in the greater prevalence of other diseases constitutional in their character. We hesitate not to say that there are no statistics to substantiate this assertion. On the contrary, the most careful and conscientious investigations of scientific men everywhere have demonstrated, that it is impossible to communicate any constitutional disease through vaccine virus, unless it be syphilis; and even with regard to this, the information obtained from various sources renders it doubtful indeed whether, with proper precaution in the use of vaccine, such a result is possible. Dr. Curschmann, of Berlin, who has written very ably on the subject, and whom we must credit with having arrived at his conclusion after the most extensive and painstaking investigation, speaks in the following terms:—"The possibility of "the transmission of a disease through vaccina- "tion has thus far been demonstrated in but "a single instance, and that is *syphilis*. Could "the opponents of vaccination show that this "occurs with any degree of frequency, or is "with difficulty prevented, vaccination would "thereby receive a severe blow; but here, unfor- "tunately, lies the weak point in our opponents' "deductions. In the first place, those cases "where the actual inoculation of syphilis has "been verified are so exceedingly rare that the "objections based upon them are consequently "materially weakened. The force of these ob- "jections is still more impaired by means of the "evidence, almost always present, that the un- "fortunate result was due to actual carelessss- "ness, or to an oversight easy to be avoided. "*Nearly all of the unhappy occurrences of this "sort are not the fault of vaccination, but of its "improper performance.*"

These statements, admittedly strong, have not been made unadvisedly, or without their author's having demonstrated, to his own entire satisfaction by the most extensive research, their correctness. And hence, it is not unreasonable to assert that the opinion expressed by a few that incalculable damage from this cause has been the result of vaccination, rests upon a very very insecure foundation. Another objection strongly urged against vaccination is that erysipelas, and in some few instances death, have followed its adoption. This would constitute a formidable argument if we were not quite certain that, even with such a risk, a vast number of lives are annually saved by the protection which vaccination secures. But in the presence of such a fact, no stronger objection can exist against this than any surgical operation which, while coupled with a like contingency, is nevertheless the only means of prolonging, or indeed saving, the life of the patient.

The all-important question in this discussion is, whether or not small-pox epidemics have, in the first place, been rendered both less frequent and less formidable by the principle of vaccination; and in the second place, whether or not those attacked after vaccination have suffered as severely as those not previously protected. That vaccination has fully met the most sanguine expectations of its original promoters, is a fact so abundantly shown by statistical information as to be beyond the shadow of a doubt in the minds of the great mass of the public. Dr. Aitken, in his admirable treatise on the Practice of Medicine, gives the following statistics, an examination of which will make it very clear that vaccination has proved a great boon. Assuming the deaths from all causes to be 1,000, he found the rates from small-pox to be, for—

London	16	Glasgow	36
Birmingham	16.6	Galway	35
Leeds	17.5	Limerick	41
England and Wales.	21.9	Dublin	25.6
Perth	25	Connaught	60
Paisley	18	All Ireland	49
Edinburgh	19.4		

In the above named places, vaccination was voluntary; and an examination of the figures discloses the fact that, in proportion to the extent and thoroughness with which it was adopted was the exemption of the people from the ravages of small-pox.

Dr. Aitken then proceeds to give statistics showing the effect of vaccination in countries where its adoption was more or less compulsory. Out of 1,000 deaths in the Rhenish Provinces the death-rate from small-pox was 3.7; in

Pomerania, 5.25; in Lower Austria, 6; in Westphalia, 6; in Saxony, 8.33; in Bohemia, 2; in Venice, 2.2; in Lombardy, 2; in Sweden, 2.0; and in Bavaria, 4. These figures exhibit an astonishing diminution in the mortality from small-pox when compared with the results in the British Isles where vaccination had, up to that time, been only voluntary. We have, in addition, further corroborative evidence of a most instructive character from the returns of Dr. Balfour for the British Army and Navy Medical Department, where every soldier and sailor is protected by vaccination. These returns show: 1. That from 1817 to 1836, inclusive a period of 20 years, with an aggregate strength of 44,611 men, and a total mortality of 627, there were only *three* deaths from small-pox. 2. They show that with an aggregate number of troops in Gibraltar of 44,611 men, during the same period, and with a total mortality of 1,291, only one death was caused by small-pox. 3. In the West Indies, where there were several epidemics during the period, not a solitary death occurred from small-pox among the British or white troops, although the aggregate strength was 86,661, and the total mortality 6,803. Among the black troops at the same station, the aggregate of which was 40,934, and the total mortality 1,645, not one case of small-pox occurred. 4. At Bermuda, Nova Scotia, New Brunswick, Cape of Good Hope, and the Mauritius, no deaths occurred during the same time, and the white troops of Western Africa escaped entirely, while the unprotected black population were dying by hundreds. 5. In Malta, during the twenty years from 1818 to 1838 inclusive, while the aggregate strength of the British troops was 40,826, and the total mortality 665, only two deaths from small-pox occurred. This circumstance is the more remarkable from the fact that the disease raged all over the Islands during 1830 and 1838, and that it destroyed 1,169 persons. In 1830 there died of small-pox, 1,048 out of a total mortality of 3,407. In 1838 there were 121 deaths from the disease, out of a mortality of 2,583. The mortality among those *not vaccinated* was 1 in 4.7. Among those *vaccinated*, 1 in 23.4.

Dr. Aitken sums up the results of vaccination as follows. "1. During ninety-one years previous to *inoculation* there are on record sixty-five distinct epidemics of small-pox; which is equal to a ratio of 77.4 epidemics in 100 years. 2. During sixty-three years in which *inoculation* was practised, and that to a very great extent, there were fifty-three distinct and well marked epidemics; which is equal to a ratio of eighty-four epidemics in 100 years. 3. During the fifty-five years, since *vaccination* has been practised, there have been twelve distinct and well-marked epidemics; which is equal to a ratio of twenty-four epidemics in 100 years."

In this country, although we are not in possession of statistics so definite as those we have just given, the general results of the adoption of vaccination as a protective against small-pox have been such as to satisfy the great majority of the profession and the general public of its unquestionable value. We have recently passed through a pretty severe epidemic, in which a large number have been attacked; and we think that two things have been amply demonstrated. First, the great majority of those who have passed through critical attacks have been unvaccinated, indifferently vaccinated, or not successfully vaccinated, for many years previously. Secondly, it has been clearly shown that where persons recently vaccinated successfully *have* been attacked, they have passed through a modified form of the disease. It has been further shown pretty conclusively that most persons exposed, but recently protected, have escaped altogether.

Now, if the statistical and other information in our possession upon this subject is of any value at all, it is difficult to understand how the ground taken by the anti-vaccination advocates is substantial in any direction. There can be no doubt that small-pox has been less frequent and less disastrous than before the discovery and introduction of vaccination. To say that it would not have been any more frequent in the absence of the expedient is a mere begging of the question, without any foundation in fact, and not susceptible of proof.

Dr. W. B. Carpenter has been made a C.B.

AN ACT RESPECTING THE REGISTRATION OF BIRTHS, MARRIAGES, AND DEATHS IN ONTARIO.

Sir,—The above Act, lately passed by the Legislature of Ontario, although an improvement upon its immediate predecessor, still leaves much to be desired, in that it still requires the great burden of the registration of deaths to be borne by a small class of the community, and thereby inflicts a grievous injustice upon that class in direct proportion to the smallness of their number as compared with the community at large. The one redeeming feature of the measure, considered from a medical point of view, is that the iniquity of compelling medical men to register all births at which they may have professionally attended, has been removed, and that obligation imposed upon the parents or certain other individuals.

A large amount of money has already been expended in the Province in order to secure a correct return of vital statistics, and, so far, with anything but gratifying results, for the simple reason that in the anxiety to secure such statistics the principle was lost sight of that all should contribute their respective proportion, to be determined alone by fate, to the accumulation of facts desired. Under just circumstances medical men would be placed in an exactly similar position with the rest of the community, since unfortunately their friends and relatives are as liable to die as are those of other people; but in the state of affairs lately existent with regard to the registration of births and deaths, and still in full force as far as the lethal clauses are concerned, the whole onus of registration virtually fell upon the medical practitioner, and because the imposition was so great and unjust, and the medical profession as a body too intelligent and influential to believe that irrational penal clauses could be enforced against them, the provisions of the Bill were ignored or disregarded, and the law became finally a dead letter. A similar fate awaits the present measure unless it be speedily materially amended.

Instances of the hardships consequent upon an enforcement of the law need not be here adduced, since they are, of necessity, familiar to all of your readers. Medical men are at all times willing and happy to furnish to the friends of their deceased patients certificates of the cause of death upon application for them, and when they have done this surely they have performed their part, and it ought to be incumbent upon the friends rather than the medical atttendant to attend to the registration of such certificate. The law should be so amended that it would be impossible for any body to be interred without a certificate from the proper Registrar, of a due registration of the death and its cause; and by this means the friends or others would be compelled to seek a certificate of the cause of death, and to transmit it to the proper Registrar before the burial could take place. Section Six of the Bill provides that the fact and particulars of the death shall be registered by some person other than the medical attendant, and the registration of the cause simultaneously with the particulars would be no more trouble than the registration of the particulars alone. Thus the trouble would be impartially divided and a full and correct return secured.

Were it not for the existence of the ancient Latin proverb "*Nil admirari*" I should be inclined to say, that it is a matter of considerable surprise that an Act so crude in its construction, short-sighted in its providence, and so unfair to the profession, should have emanated from a House in which the disciples of Æsculapius are so largely represented, and one is almost inclined to suppose that their proverbial self-sacrificing disposition has led them to forego the opportunity of urging and maintaining not only their own rights and privileges but those also of their professional brethren; but doubtless the unseemly haste manifested in the desire to get the measure through its various stages, constitutionally or unconstitutionally, before the adjournment for the Christmas recess, in order that the law might come into force on the first day of the now current year, is in no small degree responsible for the present imperfect and inequitable character of this enactment.

Yours, &c., M.B.

The Hebrew Charity Fair recently held for the benefit of the Mount Sinai Hospital, of New York, realized net profits to the amount of $135,000.

Miscellaneous.

Dr. Ward has found that the application of honey, painted on with a camel's hair brush, twice or thrice a day, prevents pitting in small-pox. He also recommends it for cracks in the skin from frost.

Sulphide of Calcium in Diabetes.—A case is reported in the *London Lancet* where an apparent cure followed the use of calcium sulphide one-eighth grain with sacch. lactis gr. iii in powders three times a day.

Address and Presentation to Dr. Evans, of Brockville.—On the evening of Dec. 29th, a number of the leading citizens of Brockville met for the purpose of making a presentation and address to Dr. L. H. Evans, Principal of the Brockville High and Public Schools, who removes to Toronto to enter upon the practice of his profession. Dr. Morden, on behalf of the meeting, presented Dr. Evans with a purse containing one hundred and twenty dollars.

In a paper read by Dr. de Sinéty before the Société de Biologie of Paris, the author avers that the investigations prove the occurrence of lactation in newly born infants; nay, more, he asserts that the fœtal breast may contain colostrum. He states that, as in the adult, colostrum is first found, and that subsequently the secretion becomes like that of the suckling mother. The sex of the infant makes no difference. He bases his statements on chemical and anatomical investigations.

Poisoning by Carbolic Acid.—A patient of the hospital, while walking down to the boat, suddenly fell down and died He had been in the habit of taking whiskey and ether in large quantities by the stomach, and had latterly commenced the use of carbolic acid. At the autopsy a large portion of the mucous membrane of the stomach was found completely blackened, and the organ emitted a strong smell of carbolic acid. The cause of the sudden death was not accounted for, but the condition of the mucuous membrane of the stomach was of interest, in showing the local effect of the agent.

A British Medical Defence Association, "To suppress unqualified practice, secret quack medicines, indecent medical publications, bogus diplomas, and *improper alliances* of qualified and unqualified medical men,"—"to protect medical men from vexatious prosecutions; to prevent the registration of non-certified deaths; to correct the abuse of out-practice at Hospitals; to devise a fair tariff of medical fees; and to give medicine a firmer political basis in the House of Commons," has been formed in London, England.

Sugar in Healthy Urine.—At a meeting of the Royal Medical and Chirurgical Society, in Nov., Dr. Pavy demonstrated the existence of sugar in healthy urine. This was, he believed, much more commonly to be found than was supposed. It might be obtained in various ways, especially by acetate of lead. Thus procured, sugar might, as he showed, be demonstrated in healthy urine by all the ordinary tests,—Moore's, or the liquor potassæ test, Bottger's, or the bismuth test, Fehling's modification of the copper test, and finally the crucial fermentation test.

British Qualifications in Canada.—The *London Lancet*, Dec. 8, 1875, in answer to a correspondent states, "Every Colonial Legislature has the power to enforce medical registration within its jurisdiction. It can require those who have been registered in Great Britain to be registered again in the colony; provided, however, that any person who has been duly registered under the Medical Act, shall be entitled to be registered in any colony upon payment of the fees (if any) required for such registration, and upon proof of his registration under said Act." (?)

A Third Dentition at the age of seventy-three.—M. Echaræ relates in the *Gazette des Hospitaux* (October 9), the remarkable case of an old gentleman, aged seventy-three, who, after manifestation of nervous symptoms for some time, and an abundant salivation, exhibited in his upper jaw, which had long been dismantled of teeth, some fine ones projecting about two millimetres beyond the edge of the gums. They

were six in number—four incisors, one canine, and one small molar. These teeth were neither very white nor very strong, but formed an excellent substitute for those lost. Van Helmont relates a precisely similar case occurring at the same age.

Poisoning by Carbolic Acid.—The *Medical Times and Gazette*, of November 27, 1875, contains a report of a case of poisoning in which the patient, a woman forty years of age, swallowed nearly a teacupful, or about four ounces, of crude carbolic acid. Twenty minutes afterward the stomach was thoroughly washed out, and a pint of olive-oil thrown into it. There was prostration, but under stimulants, milk, ice, etc., the patient gradually recovered, and was discharged from the hospital about a month after the accident.

International Medical Congress.—During the American Centennial Celebration it is intended to hold an International Medical Congress, to be formally opened at noon on Monday, the fourth day of September, 1876.

The Honorary Secretary for the Dominion of Canada, Dr. A. H. David, of Montreal, requests Secretaries of Medical Societies to communicate with him, so that invitations may be sent to all to appoint delegates.

Body Snatching.—With reference to a paragraph under the above heading, copied from the *Globe* of Dec. 3rd., in our last issue, we are pleased to learn from Dr. Dupuis that our young friends at Kingston have *no occasion* to risk life or liberty to procure the material for dissection, inasmuch as they always have had, and have now, more than they can well dispose of. As the Doctor says the "first intimation they had of any such occurrence in or about their city was the paragraph in our columns," we fear the *Globe* is not read in Kingston as it should be. Having copied the item from so reliable a source we never presumed to doubt its truth, but it only affords another illustration of the old adage, "put not your trust in Princes," even of the press.

A Plan for Checking Dangerous Mistakes in Prescriptions.—At Vienna, and we believe throughout Austria, the druggists' shops annually undergo an official inspection. One of the pharmæcutists visited was much commended by the Commissioners for a plan which he has introduced into his shop for avoiding mistakes in the dispensing of such drugs as are poisonous in small doses. This consists in indicating on the label of the jar or bottle the weight of the maximum pharmacopœal dose. In this way the dispenser is immediately warned if he meets with a prescription in which the maximum dose is exceeded, and he can take the necessary measures to assure himself against error. Orders have been given to introduce this system immediately into the shops of all the Vienna druggists.

Occlusion of the Superior Vena Cava.—At a meeting of the Pathological Society of London (Dec. 7th, 1875) Dr. Habershon brought forward an instance of occlusion of the superior vena cava in a man of thirty-seven, who had enjoyed good health as a coal-heaver until seven years before his death, when swelling and great congestion of the face and upper extremities came on with much distension of the superficial abdominal veins. He was partially relieved, but sank from ascites, paracentesis affording only partial relief. After death it was found that the superior vena cava was obliterated; its position in the right auricle was marked by white puckering of the endocardium.

The innominate vein ended in a *cul-de-sac*. Large communicating veins passed in front of the pericardium into the mammary veins; others into the smaller and greater azygos veins; and by these means the blood was carried downwards into the inferior vena cava and reached the heart. There was much fibrous thickening around the aorta, and in the position of the superior vena cava. The pulmonary valves were imperfect, being represented by two segments and the rudiments of a third on a somewhat lower level. The man had never had syphilis. There was no cyanosis whatever or other symptom before the thirtieth year.

THE MEDICAL ACT.—J. R. Smith, an herb doctor, was tried before Mayor Field, at Woodstock, on Jan. 11th, for practising medicine without a licence. He was fined $25 and costs. He gave notice of appeal to a higher court.

IS CONSUMPTION CONTAGIOUS?—Some experiments and observations recently made on the transmission of tuberculosis or phthisis from one animal to another, are worthy of note as indicating one fruitful source of pulmonary disease. Thus it has been found, that when an animal with tuberculated lungs is made the yoke-fellow of a perfectly healthy animal, and the two are housed and fed together, so as to inhale one another's breath, the one which was at first sound, before long exhibits the symptoms of tuberculosis. Again, Krebs has produced tuberculosis by giving animals milk from those which were diseased. In addition to rabbits and guineapigs (which animals are very susceptible to the production of the malady,) he accidenty induced the disease in a dog, by feeding it with the milk of a cow in the last stage of phthisis. As a result of his observation, he asserts that tubercle virus is present in the milk of phthisical cows, whether they are slightly or gravely affected. On vigorous subjects such milk may produce no injurious effects, but the case is likely to be different with children and those of enfeebled constitution. Similar results may result from eating the flesh of animals affected with tubercle, and by inoculation with the virus. Thorough cooking of milk and flesh meat neutralizes their injurious action.—*The Popular Science Monthly.*

ON THE RATIONAL TREATMENT OF COMMON TAPEWORM.

At a late meeting of the Medical Society of London, Dr. BRUNTON read a paper on this subject (*Lancet*, December 4, 1875). After stating the varieties met with in this country, and mentioning the anomalous symptoms to which they give rise (their very anomaly, he remarked, affording a clue to the diagnosis), he stated that the chief points to be observed in the treatment were: a preliminary starvation of twenty-four hours, and the administration of a combination of kameela and male fern—namely, two drachms of kameela to be rubbed up with a little gum and water till an emulsion is formed, and then two drachms of oil of male fern to be added, and the whole triturated in a mortar, with a gradual addition of water till a three-ounce mixture is formed, of which half is to be given at bedtime, and the remainder four hours later. This he had never known to fail. He insisted on the quality of the drugs being good, and spoke of the after-treatment by tonics.

THE MILLS MURDER.—It having been reported in the daily papers that physicians of the general school refused to assist in the post-mortem examination in this case, because the deceased had been attended by Homœopaths. We insert a letter from Dr. Macdonald to the *Globe*.

To the Editor of the Globe:—

SIR,—With reference to the wretched incident which occurred here lately, permit me to correct a statement of your correspondent, that in consequence of Dr. Vernon and Husband, who attended upon Mr. Mills, being Homœopaths, the Hamilton Physicians, of the General School, all refused to assist at the examination after death. I believe the physicians requested to hold a post-mortem examination on the part of Mr. Mills' friends were Dr. O'Reilly, Dr. Ridley, and, through the latter, myself. I declined for myself, and I recommended my friend Dr. Ridley to decline, because the body of the deceased, being in the care of the coroner such interference on our part, as was proposed, would be an officiousness which would in due time receive its reward. This was the only reason for the refusal, and I have no objection to accept the responsibility of it.

I am, sir,
yours, &c.,
J. D. MACDONALD, M.D.

Hamilton, Jan. 10th.

TORONTO GENERAL HOSPITAL.—A new medical Superintendent has been appointed to this institution. Doubtless the trustees selected the best man they could find ready to take the position—possibly no better appointment could be made. We must, however, protest against the manner of making such appointments. Surely when a vacancy occurs applications should be advertised for, so that all who may

wish to compete may have the opportunity, and the public may be well served by the man with the best qualifications being chosen. We venture to say that few, if any, outside of Toronto knew of the vacancy. The appointments of resident physicians or surgeons should be open to young graduates who have been good clinical students. If the appointments were made without salary, and tenable for one or two years, the assistant resident succeeding the retiring resident, a much better system would be inaugurated, hard working students would be benefitted, the hospital would be well managed, and the people would be the gainers by having practical men as their medical advisers. A Bill is at present before the Local Legislature to amend the Act with regard to hospitals. We hope that both in the interests of the public and in the interests of the profession, our representatives will see that provision is made for the proper advertising of vacancies in the staff. The system we advocate works well in Great Britain, New York, and Montreal, and there is no reason why it should not be adopted here.

The Male Urethra.—Sir Henry Thompson, in a lecture delivered November 15th (*Lancet*, November 27th) says of the urethra :

First, let me assure you that the urethra is not a tube at all, in any sense in which we employ that word. It is not like a gaspipe, or an India-rubber tube, or even a flaccid tube of any membrane whatever.

It is rather *a continuous closed valve, capable of transmitting fluids and solids in one direction only, and transmitting nothing whatever in the opposite direction, except in obedience to applied force.* Its length in the male makes us think of it as a tube, but this is a mere accident of sex. An inch or less is amply long enough for its urinary function, as in the female ; and all the length it possesses above that is quite useless as a *urethra*, and renders it liable to disease and accident—the price, and a heavy one, let me tell you, which the male pays for his specially distinguishing feature. In illustration of this, I have but to refer you to the innumerable difficulties and dangers associated with stricture, retention of urine, and calculus, which are almost unknown in the other sex. It is, then, in the male, simply a long valvular chink, traversing soft and most delicate vascular and nervous tissues, always firmly closed, and never opening except for a few seconds, during which fluids have to be transmitted from the body. Then, for a few seconds, it is distended more or less, and becomes a tube if you please, for this short time and this only, equaling, perhaps, at most, three minutes in the twenty-four hours. All the rest of the time it is firmly closed, and not one drop of fluid can pass from the bladder. Of course, oozing of liquid which is generated in the walls of the tube, or which enters it by ducts, may escape, but always, inevitably, in the outward direction only.

South Victoria Medical Association — At a meeting of the South Victoria Medical Association, held to-day, resolutions were passed strongly condemnatory of the *Globe* newspaper in its advocacy of unrestricted commerce in medical practice without regard to proper medical tuition, as highly detrimental to the public good and morals ; also condemnatory of the action of the Medical Council in their late meeting in appointing from amongst themselves a Board of Examiners and voting to each other the sum of seventy dollars as remuneration for such service. The Association agree that it would have been in better taste to have made their selection outside the Council, satisfied that there were equally well qualified men to be found outside that august body, and that it would be in their own interest and the good of the profession that they reconsider the matter. Thanks were tendered to Mr. William Allison, representative for King's and Queen's Territorial Division, for his advocacy of an Independent Examining Board. The Government are asked to make the registration of deaths compulsory on the responsible representatives of the family in which death takes place, instead of at present on the medical man in attendance, as too often the medical man is not aware when the death does occur after his visit, is not conversant with other particulars required, and in many cases the medical man is not in attendance at all. The Association further strongly advise their representative to allow no further concession in

regard to medical curriculum of study to be allowed the homœopaths, eclectics, or other specialists, but in all fundamental branches and matriculation examination, the medical examination be equally strict and alike to all.—*Mail.*

Sir Wm. Withey Gull, Bart., M.D. Born nine and fifty years ago in Essex, and sent early to Guy's Hospital in London.—Sir Wm. Gull has led a laborious life and achieved brilliant results. As a young man he conceived an enthusiasm for medicine which he retains to this day, and therewith a large idea of the various kinds of knowledge required for its faithful practice, which has caused him to address himself to a very large sphere of scientific inquiry. For in all science he devoutly believes so thoroughly as to hold that it alone is sufficient to raise, and will in course of time raise, the human race toward if not to perfection. In this frame of mind has he come to his work, has manfully wrestled with every kind of ascertained facts that could bear on his profession, has added much to them, and has obtained from them by passing them through his singularly clear and unprejudiced reasoning faculties, results which to many have seemed astounding. He is sparing of drugs, and observing of the patient, believing rather in physiological physic founded upon a study of individual peculiarities, than in the confident administration of medicine according to art, and seeking less to battle with disease violently as with an enemy, than to woo Nature gently, as a friend to that restoration of her functions which he has so often achieved. He has filled and still fills many of the most honourable offices of his profession, and three years ago he was made a Baronet and Extraordinary Physician to the Queen, after his famous achievement of snatching the Prince from death. He is a philosopher and a man of strong will, yet of gentle presence, with soothing manners and a hawk's eye; precisely the kind of man to give comfort and confidence to the sick, of whom there are hundreds to record and remember that he is one of the most successful of those who have addressed themselves and given their lives to the relief of human suffering and the salvation of human life.—*Vanity Fair.*

Examination Questions at the Royal College of Surgeons, England, in November.—Medicine. 1. Describe a typical case of typhoid fever with its treatment. For what other diseases might it be mistaken, and how would you distinguish between them? 2. Mention the chief morbid changes to which the valves of the heart are liable. State the effects produced on the walls and cavities of the heart by these affections: and give the leading signs by which they might be recognized during life. 3. Indicate the medical qualities of the following preparations, of the class of cases in which they are used, together with the doses:—Extract ergotæ liquidum; tinct. digatalis; elaterium, ether sulph.; acidum gallicum; extract belladonnæ; plumbi acetas; hydrargyri perchloridum; liquor arsenicalis. Surgical Anatomy and Surgery.—1. Describe the dissection required to expose the right common carotid artery; on what part would you place a ligature? 2. Mention the structures divided in a circular amputation through the middle of the arm; 3. Describe the symptoms and treatment of delirium tremens following injuries. 4. What are the microscopic appearances presented by articular cartilage when undergoing the changes described as absorption? 5. Give the pathology, diagnosis, and treatment of psoas abscess. 6. What are the symptoms of a complete transverse laceration of the urethra in the perineum? How would you treat the injury? And what would be the most probable results? (Candidates are requested to answer at least four—including one of the first two—out of the six questions. *Fellowship examinations. Nov. 25th.* Describe minutely all the changes observed in the vessel, its branches, and its contents during the repair of a large artery after ligature. 2. What are the causes of non-union after fracture of a long bone? Describe the treatment you would adopt to obtain union. 3. Mention the conditions, local and general, coexistent with the fracture of the skull? Which would guide you to a decision as to the propriety of trephining. 4. A man is the subject of strangulated inguinal hernia, with well marked symptoms. Taxis is applied, and the rupture passes back into the abdomen. Four hours afterwards, when the

man is seen again, there is still urgent vomiting and no relief of the other symptoms. Explain the view you take of the probable nature of the case, and the treatment you would adopt.

Atmospheric Pressure on the Joints.—The current opinion has hitherto been that the influence of atmospheric pressure in retaining the two surfaces of a joint in contact is, with the exception of the hip-joint, only exerted on the joints as long as the soft parts, especially the capsule, remain intact, and that a simple opening in the latter is sufficient to destroy it entirely. Prof. Ch. Aeby, of Berne, however, in a preliminary communication to the *Centralblatt*, March 27, 1875, p. 228, announces the startling fact that, according to experiments which he has lately instituted, in the greater number and the most important of the joints in the human body the atmospheric pressure is fully adequate to retain the surfaces of their constituent bones in contact, even after the division of all the soft parts, including the capsule. This statement is true of the shoulder-, elbow-, and wrist-, as well as of the hip-, knee-, and ankle-joints, and the experiment succeeds in nearly every natural position of the joint, so that the extremity below any particular articulation can be made to swing within its normal limits of flexion, supported by the pressure of the air alone. Thus, as Prof. Aeby expresses it, "when it is found that the arm will hang completely disarticulated in the shoulder-joint, the forearm in the elbow-joint, or the hand and fingers in their respective joints, no further proof is required that the ordinary teaching with regard to the relation of air-pressure to the joints is completely erroneous." Prof. Aeby will shortly publish his experiments and deductions made from them *in extenso*. We may here add that Dr. Fr. Schmid (*Deutsche Zeitschrift für Chirurgie*, v. 1874), has lately found by experiment that the atmospheric pressure which retains the surfaces of the hip-joint in contact is not only sufficient to support the lower extremity unaided by muscles or ligaments, but even to carry an additional burden equal to a third part of the weight of the leg.—*Med. Times and Gazette.*

Puncture of the Pericardium.—The following case is reported in the *Archives Médicales Belges* by Dr. Villeneuve: A child five years old, was suffering from pericarditis with effusion. According to the statements of the parents, the trouble dated from a fall two months before, soon after which the breathing began to be affected, the legs swelled, and the condition grew gradually worse. When the patient was seen by V. the symptoms had become very alarming. The face was swollen and mottled, the eyelids were œdematous, the lips cold and livid. There was also considerable œdema of the legs and scrotum. The pulse was too feeble to be counted, and auscultation failed to discover any cardiac sounds whatever. A fluctuating swelling, which undulated synchronously with the respiration, occupied the precordial region. Respiration was short, labored, whistling, and accompanied with pulsation of the jugulars. The case appeared desperate, and no medical treatment offering any prospect of success, it was resolved to interfere surgically. A Dieulafoy's aspirator was procured, and the tumor having been punctured at its most prominent part, two syringefuls of clear, yellowish fluid were withdrawn. The fluid continued to flow in a stream after the canula was removed, owing to the fact that the repeated application of blisters to the part had so thinned the skin as to prevent the edges of the wound from closing. With the aid of plasters, compresses and bandages, however, the aperture was finally closed. The result of the operation was a very marked relief of the child's asphyxiated condition; the heart-sounds could be heard again, and the pulse could be counted. The wound continued open and discharging for six months. The discharge was at first clear, and afterwards became purulent. The fistula finally healed, and the patient made a complete recovery.—*Journal de Médecine.*

Carcinoma of the Stomach.—A patient complained chiefly of pain in the hip and back, until her attention was drawn to other symptoms, when she admitted that she vomited quite regularly about an hour after each meal, if she ate anything besides gruel and whey. She was

forty-two years of age; there was no hereditary taint with malignant disease, so far as could be ascertained, and she had never suffered from any sickness except the present, which began eight weeks ago. Upon examination, a tumor, about the size of a hen's egg, was found in the region corresponding to the usual situation of the pyloric extremity of the stomach. The woman did not suffer very much pain referable to the stomach, nor had she ever vomited blood or coffee-ground material. But cancer of the stomach may be present without producing pain, and it sometimes occurs without vomiting, a fact which is often overlooked. When the cancerous disease is situated in such positions as not materially to interfere with the movements of the stomach, or is outside of where it will produce obstruction, vomiting may be absent.—*N. Y. Medical Record.*

The Treatment of Vaginismus.—M. Bouchut, of the Hôpital des Enfants Malades, writing on this subject, says that he has seen several young women who, after marriage, had at the inferior part of the vaginal orifice, near the fourchette, a small longitudinal fissure, which was very painful to the touch. The contact of the finger produced an acute pain just like that due to anal fissure. The same phenomenon supervened on attempting coitus, and checked its accomplishment. It is not correct to say that vaginismus is only seen in non-virgins, as M. Bouchut has observed it in a virgin, affected with lymphatic leucorrhœa, who had been ordered injections, but these had to be discontinued on account of the pain which the syringe caused. In this case a slight fissure of the hymen was the cause of the pain. M. Bouchut does not think that forcible dilatation of the vagina, as in a similar affection of the rectum, is the best mode of treatment, and recommends the following plan before having recourse to operative measures. He says,—"In many cases I have cured patients without operation and by the most simple means, such that every medical man may employ every day. These consist in the use of vaginal suppositories, containing cacao-butter, five grammes; extract of rhatany, three grammes; and of baths of bran-water. One suppository should be introduced night and morning, then every day for an hour the patient should take a bath of bran-water." In this way M. B. cured several cases of vaginismus without having recourse to an operation as disagreeable to the women as to their husbands.

Postural Treatment of Shoulder Presentations.—Dr. P. R. Maxon, of Syracuse, New York, thus describes his plan of treating shoulder presentations:—"Gravity is the principle invoked; and I was led to the discovery in 1860 by placing a woman with prolapsed cord on her knees, with her head and shoulders low, as recommended by Dr. T. G. Thomas, of New York, in order to effect its reduction, and finding that while she was in this position an abnormal (abdominal) presentation was spontaneously converted into a normal one. Having reflected on this circumstance, I was induced a few weeks later, when called in consultation in a bad shoulder presentation, to try position as a means of rectifying it. I was very anxious in regard to the case, because the lady had lost three children already from 'turning to deliver' in shoulder presentation. Her regular attendant, Dr. G. N. Dox, of Geneva, New York, a physician of attainment and experience, happened to be the confrère in whose practice the case of prolapsed cord, above referred to, had occurred; and instead of 'turning' himself, as had been so unsuccessfully attempted in the lady's previous labours, he sent for me in consultation. Remembering the fate of the other children, and finding this one very large, I suggested the feasibility of correcting this shoulder presentation in the same manner as I had corrected the abdominal in the first instance. With his consent I made the effort in the following manner:—I folded several quilts compactly, laying them upon one another to the height of about one foot, and assisted her to kneel upon the quilts, with her head and shoulders resting upon the bed, and her face forward, so as to bring her body to an angle with the bed of nearly 90 degrees. I then pressed my hand gently against the shoulder, which readily receded, until I was enabled to clasp the vertex with my fingers, and with the assistance of the next pain to so 'engage' it that, when the patient was placed upon her left side and the quilts removed, a perfectly natural presentation presented itself. In a few hours the labour terminated in the delivery of a healthy boy, weighing ten pounds. Only a few moments were occupied in the process, and subsequent experience convinces me that shoulder presentations can generally be converted in this way into natural ones, without a resort to 'turning,' and with no risk for the mother or the child."—*Lancet.*

Nervous Cough as a Reflex Symptom of Anteversion of the Uterus.—Dr. Malachia de Christoforis reports the following case: A lady of twenty-three had suffered for a long time from a nervous cough, having these peculiar features. It occurred only in the day-time, disappearing as soon as she lay down, whether at night or in the day-time. There would be a series of eight or ten dry coughs, followed by half an hour's quiet. She had also suffered for a year from frequent micturition and a dragging sensation in the lumbo-sacral region. Various nervines had been tried ineffectually. Her history was, that her first and only pregnancy, two years before, had resulted in an abortion at three months, and had been followed by some persistent leucorrhœa and lumbo-sacral pain, aggravated by standing and walking. On examination, the larynx, chest, and abdomen were found free from disease, nor was there any sensitive point in the spine; there were two painful points in the face, however, referable to the trigeminus. On making a vaginal examination, the uterus was found enlarged and anteverted, so that the body lay behind the pubic bone and the cervix pressed against the sacrum. These abnormal relations were remedied on her assuming the horizontal position. A double curved Hodge's pessary was introduced, which restored the uterus to its normal position, and the cough was relieved, to return, however, when, by way of experiment, the pessary was temporarily removed after a few days. After a year it was no longer required. The author's theory is, that these reflex symptoms may have arisen from pressure of the body of the uterus upon the bladder, from traction upon the utero-sacral ligaments, or from pressure of of the cervix upon the posterior sacral plexus or its branches—perhaps all three reasons combined.—*Schmidt's Jahrb.* in *Medical Record.*

Death of Mr. Hinton.—The death is announced of Mr. James Hinton, Aural Surgeon to Guy's Hospital. Besides his works on aural surgery, Mr. Hinton published several learned philosophical works. He retired from practice in 1874, and died at the island of St Michaels (Azores), on December 16th last.

The death is announced, at the age of 75, of Wm. Sands Cox, F.R.S., F.R.C.S., D.L., of Birmingham, England.

We observe by our exchanges that Dr. Edward Martin, Director of the Institute for Clinical Midwifery at the University of Berlin, Dr. Charles E. Squarey, and Dr. Lorenzo Desmond, of Liverpool, are dead.

APPOINTMENTS.

De Wolfe, G.H.H., M.D., Canada; M.B., C.M. Univ. Edin., has been appointed medical officer to the Tintern District of the Chepstow Union, and to the Tintern Abbey Iron and Wire Works.

Samuel W. Moore, of the Village of Nilestown, M.D., to be an Associate Coroner in and for the county of Middlesex.

Dr. James White has been appointed Resident Physician to the Hamilton Hospital.

Births, Marriages, and Deaths.

BIRTHS.

At 336 Yonge Street, on January 24th, the wife of J. E. Graham, M.D., of a daughter.

On the 17th inst., corner of John and McGill streets, the wife of Dr. T. J. W. Burgess, of a daughter.

On the 16th inst., at London, the wife of Dr. C. A. Gibbs, of a son.

In Blyth, on the 1st inst., the wife of Dr. Sloan of a son.

At Ann Arbor, Michigan, on the 17th inst., the wife of Professor Donald Maclean, M.D., of a son, still-born.

MARRIAGES.

De La Hooke—Pell—On the 19th inst., at the church of the Holy Trinity, by the Rev. W. S. Darling, James Ackland, eldest son of Dr. De La Hooke, to Adelaide Elizabeth, eldest daughter of the late Mr. J. C. Pell.

DEATHS.

At Frankford, on 3rd of January, Amanda M., the beloved wife of Dr. A. J. Campbell.

At Chippewa, on the 13th inst., Mary Vernon, infant daughter of E. A. Gaviller, M.D.

On the 12th of December, at his residence, Swede Point, Iowa, U.S., G. A. Palmer, M.D., aged 32 years and 9 months, youngest son of James Palmer, of Danforth, Scarboro', Ont.

Barrett.—At Winona, Miss., on the 19th inst., Mrs. F. Barrett, relict of the late Michael Barrett, barrister, and mother of Dr. M. and R. G. Barrett, of this city, aged 80 years.

THE

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TORONTO, MARCH, 1876.

Selections: Medicine.

TREATMENT OF CROUPOUS PNEUMONIA.

BY PROF. JUERGENSEN.

(*Ziemssen's Cyclopædia of Medicine*, Vol. 5.)

[Communicated by F. H. WRIGHT, M.B., L.R.C.P., Lond.]

Juergensen defines croupous pneumonia, anatomically considered, as an acute inflammation of the alveoli and bronchioles, in which a fibrinous exudation is poured out upon the free surface of the mucous membrane and there coagulates.

Before entering on the question of the treatment of the disease it is necessary to define whether one regards it as a constitutional or a local affection. The author puts the following queries: "Do facts justify us in regarding the anatomical changes always found in the lungs in croupous pneumonia as the essential cause of the other symptoms, especially the fever and constitutional disturbance? Or, are the pulmonary lesions and the fever both due to a common fundamental cause? Is there also a specific morbific agent, which excites what we call croupous pneumonia as a result of its variable action upon an organism already predisposed to the disease?"

His answer is: "Croupous pneumonia is a constitutional disease, and is not dependent on a local cause. The pulmonary inflammation is merely the chief symptom, and the morbid phenomena are not due to the local affection. The hypothesis of a morbific cause is indispensable. Croupous pneumonia belongs to the group of infectious diseases."

In Vol. 1 of the *Cyclopædia*, Liebermeister divides infectious diseases into three groups: 1. Purely contagious; or, those diseases the poison of which is conveyed from one individual to another by direct contact, or by *mediate* contact as in the case of vaccine, which is conveyed by means of the instrument used by the vaccinator. 2. Purely miasmatic diseases, in which the morbid poison develops itself outside the body, and which is not reproduced within the body so as to affect others secondarily, as intermittent fever. 3. Miasmatic contagious diseases which are not conveyed from one person to another by direct contact, but by means of a poison which originated within the body and underwent some change after leaving it.

The fact that the anatomical changes in croupous pneumonia are distinct from every other pulmonary inflammation is a telling argument. Croupous pneumonia cannot be produced by any of the usual causes of inflammation, however strong or weak their action, as in typhoid fever there must be a special exciting cause.

In support of his views from a pathological standpoint he adduces the following arguments:

1. "During the whole course of pneumonia there is no constant relation between the local and the febrile symptoms, nor dependence of the one upon the other. The smallest pneumonic consolidations often run their course with the severest fever, and, on the other hand, we find extensive inflammations with a very moderate fever." He then points out that days and weeks may elapse after the temperature has become normal before the local lung trouble is entirely cleared up.

2. "Croupous Pneumonia is a disease which runs a typical course. No affection which arises from a local lesion presents a career so definitely limited in point of time, as is the case with croupous pneumonia. Intermittent fever, the acute exanthematia, the different varieties of the typhoid group, in short, all the diseases which we regard as due to the action of a specific morbific cause are characterized by a regularity connected with certain days. So long as the morbific cause continues its sway, the laws established by it continue in force. Now, besides these laws, the body is subjected also to the laws of vitality, and the co-existence of these destructive and conservant forces can be clearly recognized. When the activity of the morbific cause subsides, it only remains for the conservant forces to restore the normal condition." Moreover, every infectious disease may be divided into two periods. The first, that during which the morbific cause dominates, the second, that which is governed by the strength of the patient's constitution. The manner in which croupous pneumonia runs its course is closely allied to that of the acute infectious disease.

The author then argues that croupous pneumonia, acute articular rheumatism, and epidemic cerebro spinal meningitis, should all be classed under the head of malarial infections. He then goes on to say that he is the more desirous that croupous pneumonia should occupy its proper position, because the moment we are convinced that we are dealing with an acute infectious disease—a constitutional affection with local symptoms, and not with a local affection with constitutional symptoms—from that moment the indications for treatment are radically changed.

"When we realize that we have to combat, not an inflammation, but rather a constitutional disease, and one, moreover, of comparatively short duration, we readily fall into an expectant treatment which bides its time, interferes only when necessity requires, and does not see in the mere name of the disease an indication for attack. If we regard croupous pneumonia as an acute infectious disease, the indications for treatment are very much simplified. Nature cures, and the only duty of the physician is to maintain life until this cure is effected. This is the principle which underlies the management of all acute infectious diseases, and is applicable here unconditionally.

"Can we succeed in cutting short or aborting a pneumonia?" If the disease be regarded as simply a local inflammation, then we are justified in resorting to those remedies which are known to be of service in the treatment of local inflammations, as blood-letting, etc. The same thing may be said in regard to all other modes of treatment which are asserted to cut short the disease, for if we regard a pneumonia as a constitutional disease then such treatment can only be regarded as empirical.

"If we analyze the morbid phenomena, which are constantly present in this disease, we find that they consist of—(1) An interference with the function of the lungs; (2) Fever. Neither of these conditions is fatal by itself. As soon as the falling temperature announces the crisis, the pulmonary affection becomes almost completely subordinate and insignificant, although the functional disturbance in the lungs has, to all appearance, undergone but little change." In the majority of cases the increase of temperature is of such short duration and so moderate in amount that it is not sufficient to cause death; rarely, the fatal result may be due solely to the extent of the infiltration, or to the height of the fever.

"The danger in croupous pneumonia threatens principally the heart of the patient. Death results from insufficiency of the heart. And now for the proof of this opinion.

1. "The exudation in pneumonia produces an increased resistance in the pulmonary circulation, and consequently increased effort on the part of the right ventricle.

2. "The changes produced in and near the lung by pneumonia diminish the total amount of force to be furnished by this organ for the movement of the blood.

3. "In pneumonia the surface over which blood and air come in contact with each other is diminished by the exudation, and this fact necessitates increased labour on the part of the forces which impel the blood and air whenever an abundant exchange of gases is required.

4. "The fever first brings to expression the local disturbances produced by the pneumonia.

5. "The fever induces increased labour on the part of the heart, and at the same time inflicts a direct injury upon it."

From all sides the threads run together to a central point. It is the heart, and always the heart, upon which the burden is ultimately thrown. It is therefore the duty of the physician to enable the heart, during pneumonia, to

perform the additional labour made necessary by the disease.

"This duty involves two subdivisions.

1. Prophylaxis against exhaustion of the heart.

2. Control of already existing exhaustion. This is shown by the fact already repeatedly urged, that notwithstanding the continuance of the local derangement, the force of the disease is usually broken when the fever abates.

Is it proper to bathe a patient who is ill with pneumonia, to abstract heat directly? It may be fairly urged that from the moment when the peripheral vessels contract under the influence of cold, the bath produces an increased resistance in the vessels, and consequently an increase of work for the heart. It becomes a question, therefore, whether the overloaded heart may not in this way become completely paralyzed. The author assures us that neither he nor his pupils have ever met with such a result, although he has used the bath both frequently and systematically, and at a very low temperature. He does not deny that fatal collapse may occur during the bath, or that the bath may be a direct cause of death; but he insists that the collapse may be avoided by a very simple precaution—the administration of stimulants. The common objection to the use of the bath, namely, the danger of contracting a cold, is shown to be imaginary; indeed the author under unavoidable circumstances has allowed his patients to bathe while exposed to a draft of cold air, without their receiving any injury. Nor has he noticed that such sequelæ as chronic pneumonia, phthisis, &c., were apt to occur from this cause. Hence, in case the abstraction of heat were necessary, and no water were to be had, he would not hesitate to expose his patient to cold air until the necessary amount of cooling was obtained.

"The amount of heat to be withdrawn depends upon the amount of fever. A bath at the temperature of well-water should be administered as often as the temperature in the rectum reaches 104°F. The duration of the bath should depend upon the effect obtained, and should vary from seven to twenty-five minutes." In aged or very fat persons, or in those of feeble constitution, in whom the temperature rarely exceeds 103°F., tepid baths are administered, for from twenty to thirty minutes, between the hours of four and seven a.m., and this, especially if assisted by a dose of quinine, will generally suffice to keep down the temperature for a very considerable time. As long as the low temperature lasts, the heart, so to speak, takes a rest; of course the baths may be repeated at any other hour in the day. The careful examination of the pulse will readily detect when the proper effect of the bath has been attained. With young children the wet sheet may be used.

In extreme cases of pneumonia, where the temperature is much elevated, the fever can only be subdued by the most energetic use of the bath. The author gives us most convincing evidence of his own faith in its use when he tells us that in the case of his own child, where the temperature rose above 105.8°, and returned of quickly after baths 60.8°F., he found himself compelled to reduce the temperature of the water to 41° and 42.8°F., and to continue them for ten minutes. His child recovered, and at no time during the employment of these extreme measures, extending over several days, was there the slightest indication of collapse. One precaution, however, is most positively insisted on;—a patient with pneumonia must never be bathed without the administration of stimulants before and afterwards, and the amount of stimulant must be increased when water of a lower temperature is used, or the duration of the bath is lengthened. Stimulants should be used after the bath, because the cooling process, which does not reach its maximum till from fifteen to thirty minutes later, is very apt to produce symptoms of collapse in persons with feeble hearts. If the bath be quite cold a stimulant is given before the bath, repeated while he is in it, and immediately after he leaves it. No absolute rules can be laid down; the quantity must be determined by the character of the pulse. Once more, he says, "let me insist most positively, that if we wish to treat pneumonia by cold baths, without unfortunate accidents, we must not spare stimulants."

In addition to the direct abstraction of heat, quinine is always used. "Above all other antipy-

retic medicines it possesses the invaluable advantage of reducing the temperature without injuring the heart, and this it accomplishes by diminishing the production of heat." When properly used, quinine diminishes the temperature for at least twelve hours. The greatest reduction takes place from five to seven hours after the medicine is taken. The following formula is recommended as a suitable dose in moderately severe pneumonia for an adult: ℞ quin. sulph. gr. xxx, acid muriatic q.s., aq. distil. ʒiiss., misce. To be taken at one dose. This should be given between six and eight, p.m., and should be repeated in forty-eight hours, the reduction in temperature being greater when so administered. When the fever is intense 77 grains may be given to an adult, and 15 grains to a child under one year. The author further states that he has never seen any harm done by these large doses, and he does not believe they are the limit. He has but one caution to give. In those cases in which the temperature has at some time been 105.8°, and has risen again rapidly after an unsatisfactory abstraction of heat, it is not necessary to give, forthwith, 77 grains of quinine, this should be done only when the repeated use of decidedly cold baths has lowered the temperature for but a short time, and smaller doses have proved useless. If the dose be refused by the stomach it may be given in the form of enema, in a mucilaginous vehicle, with a few drops of laudanum. The author strongly objects to the use of tartar emetic, veratrine and digitalis, except when the latter is used as a cardiac tonic. The antifebrile action of venesection is slight and uncertain. "The physician who bleeds in pneumonia on account of the fever, resembles the philosopher who cuts down the fruit-tree in order to get the fruit. The advocates of this indication for blood-letting furnish in their own reports of cases the most convincing evidence of the inadmissibleness of the measure. At all events, this indication should disappear from the text-books. To the conscience of the weak man, whom fate makes a physician as a punishment to his fellows, it serves as a welcome salve, when he lets blood merely to gratify a popular demand and establish his own position."

In the way of nourishment the author recommends a plentiful supply of milk, eggs, soup, and finely scraped rare meat, on bread and butter. He believes that the frequent cleansing of the mouth and teeth is an important aid in maintaining the appetite.

In the antipyretic treatment of pneumonia it is considered absolutely necessary that the patient should take light wine in amount suitable to his age and habits; for an adult say from half to a whole bottle daily. The portion which is not used just before and after the bath may be mixed with water and drank at pleasure during the day. He has no objection to good beer. Has no doubt that alcoholic drinks lower rather than elevate the temperature, and it is more than probable that the alcohol acts as a direct preservative of the tissues. The former prejudice, which is still prevalent, has been shown by Bowvier and Binz to be unfounded.

Pain and sleeplessness should never be allowed to go unrelieved. For the relief of the former the hypodermic injection of from one-sixth to one-fourth of a grain of morphia generally answers, and will also relieve the cough. Insomnia should be relieved by narcotics in sufficiently large doses. The bedroom should be well lighted and ventilated.

In the treatment of already existing exhaustion of the heart stimulants are strongly recommended, as they not only spur the cardiac muscles to do more work, but they also directly enable the heart to perform it. Every vigorous pulsation of the heart forces more blood out of the overfilled right ventricle into the left, and benefits first of all the heart itself by supplying it with more oxygen and removing the accumulated débris of oxidation. It is possible by the proper and bold use of stimulants to maintain life in pneumonia for at least three or four days after the heart has shown indications of exhaustion.

In the less serious forms of cardiac exhaustion four ounces of a strong wine will generally be sufficient. If these milder attacks occur frequently an emulsion of camphor, two scruples to six and a half ounces of water—a tablespoonful every two hours—is preferred. If the symptoms continue, without becoming

alarming, a tablespoonful of strong wine is given alternately with the camphor emulsion every hour or half-hour. Should sudden and severe collapse take place, musk may be given in ¾ of a grain to 2-grain doses, with champagne every ten to thirty minutes. Musk acts rapidly like champagne, camphor more slowly, but its effects last longer. More rapid still in its effects is cognac or whiskey, given hot.

Convalescence is promoted by abundant nourishment, especially albuminates; beer and wine are given with caution. In the way of medicines he gives ferruginous preparations, and prefers, of these, ferrum redactum.

The author has treated 248 cases according to the principles above described, with 30 deaths, or 8.26 per cent.

ON THE PROPRIETY OF BLEEDING IN ACUTE DISEASE.

BY J. T. MITCHELL, F.R.C.S., ETC.

"Medio tutissimus ibis."

During more than thirty years I have filled the office of medical director of one of the largest life-insurance companies of the country, and one part of my duty in it has been to record the cases of death that occur therein, and the causes thereof; and from the frequent instances in which death has occurrred from acute pleuro-pneumonia, peritonitis, and other inflammatory attacks of vital organs, in subjects many of whom were young, and who, before these fatal illnesses, had enjoyed robust and vigorous health, I have been induced to ask myself—What has been and what is the cause of this fatality?—when, in considering its comparative rarity in my own extensive and protracted experience, I have been drawn to the conclusion that the valuable theory of inflammation taught by the immortal Hunter is thoroughly misunderstood, and has been so now for a long period, and therefore the most palpable means for its relief has been so neglected. I allude to general and free bleeding in the early stages of such affections—a practice which for many years has been most unwisely and unjustly reprobated by teachers and hospital practitioners, and which now is scarcely ever heard of but as one to be utterly condemned.

During the last year, however, my hopes have been revived in the belief that physiologists and pathologists are returning to a wise reconsideration of the legitimate use of this effective agent—the lancet. First, as it was shown in the address of that acute observer, deep thinker, and orldwide-esteemed pathologist and physiologist, Sir James Paget—given by him before the assemblage of the British Medical Association at its meeting in 1874 at Norwich—in which he alluded with so much force of argument to the neglected practice of general bleeding in acute disease, and to its great value when adopted under the guidance of sound medical intelligence; and, secondly, in the published opinions on the same subject, made by Dr. Richardson and others who have had extensive and convincing experience in the proper use of the remedy, found in papers published in the medical periodicals.

I remember, also, that some years since I was present at a meeting of the Hunterian Society of London, when the late Mr. Solly read a paper on the subject of bleeding, in which he expressed himself very much in the same manner, and having the same object above him as Sir James Paget had in the address before alluded to, setting forth the neglect into which this remedy had unfortunately fallen, considering, as he did, its great value when used with sound discretion, and confining its use to cases in which recently established congestion or inflammation existed in vital organs—a state which, if not unchecked in the early and first stages, so rapidly runs on to destructive disorganization, such as sphacelus, abscess, dangerous hemorrhages (in the brain or lungs), dropsies, injurious adhesions, outpourings of coagulable lymph, and death, as well as in permanent enlargements and indurations of viscera, and many other chronic affections with which modern practice has continually to contend, and which, by the adoption of this remedy at the proper period, would often have been entirely prevented.

I am quite willing to acknowledge that there was a time when many men, guided by mere custom or ignorant routine, most inconsiderately bled, too frequently, and to a most injurious extent, by which recoveries were greatly im

peded, and perhaps where even death was the result; but there never was a time when, in robust subjects attacked with acute local congestion, bleeding, adopted at a sufficiently early period, did not readily suspend excessive vascular action, and so tend to prevent subsequent disorganization. But I repeat that it is only at a very early period that this remedy can be so advantageously employed; for after the first stages of these affections are passed, seldom anything but disadvantage can be expected to follow, for then every drop of blood—the very "*pabulum vitæ*"—the essential material required to carry on the reparation of the damage done by the disease and restoration of the lost strength,—and every means having reparation for its object, must be devised and adopted—*is* urgently wanted.

I will, however, most earnestly emphasize my fixed conviction, by declaring that nothing that I have observed in the extensive field of public and private practice, now protracted as student and practitioner beyond sixty years, has ever shown me that the abstraction of blood under the circumstances described has ever done harm, or has not been the most ready and efficient means of cure.

(The writer then gives the history of a case of pleuro-pneumonia to which he was hastily summoned during the year 1847. On reaching the patient he found him pulseless, with extreme difficulty of breathing, lividity of the face, cold extremities, and, to all human appearance, in a moribund state. The course of treatment adopted—certainly a very heroic one—with its result, is very well worthy of perusal.)

I first procured two large pails, and got them filled with water about 100°. Having placed them at the side of the bed, I carefully raised him from the recumbent to the sitting position on the edge of the bed, and put each foot and leg into one of the pails. I then had two wash-hand basins nearly filled with water of the same temperature, and placed his hands and arms as deeply as I could get into them. I then tied up his right arm, for the purpose of "raising a vein." At first, pulseless as he was at the wrist, no vein would rise, but after a minute or two a vein became sufficiently prominent to enable me to make a free incision into it: the first effect of this was that blood flowed only drop by drop, but in a short time a small continuous stream followed, until enough blood had passed to relieve the stagnant circulation, when the stream increased, and at last it flowed *pleno rivo*,—upon which my young friend's formerly sceptical countenance changed, and began to brighten with evident astonishment, and he expressed his wonderment. By this time the pulse at the wrist had become restored to considerable power, the venous livid congestion of the face had considerably lessened, and very soon it entirely passed away. I now requested the man to inspire as deeply as he could, upon which he said the pain in the chest and side was greatly lessened. I still allowed the blood to flow, until sixteen ounces had been collected in the basin, at which time he said he had no more pain, but he felt extremely faint; upon which, having secured the vein, I removed him from a sitting to a recumbent position, and gave him two grains of opium; after which, having dark ened the room by drawing down the blind, we left him, having directed the wife to give him nothing but warm milk, and as much as he might be disposed to take; and if he should fall asleep, by all means to prevent his being awoke. All this took place about mid-day, and at six in the evening we went again to see him, when we found him with a countenance bearing a natural aspect, pulse distinct and of moderate power, and about 100 in the minute; his breathing very much relieved, but still more frequent than natural; but the pain in the side had returned to a slight extent, upon which I again tied up his arm, and, from the same orifice previously made in the vein, drew off in a good stream, six ounces more blood: this entirely relieved him. I then repeated the dose of two grains of opium, and left him, having reiterated the instructions given in the morning. From this time, by implicit rest, sedative diaphoretic medicine, counter-irritation by mustard-plasters on the chest, and light nutritious diet—chiefly milk—he day by day rapidly improved, so as to be able to return to his work after a fortnight's interval.

On observing the conspicuously sudden and unmistakable result which followed the bleeding, my young friend declared as we walked

from the house, that he had learnt more of practical pathology, therapeutics, and physiology relating to the functions of the heart and lungs from this case and treatment than he had gained by all his previous studies and observations made during the time which he had spent at the hospital, and in the course of his four years previous apprenticeship, which he had passed in a large dispensary in a populous town in the West of England.

Innumerable cases of the same severe type as the one described, perhaps a few of the same very alarming character, have been treated in like manner, and with the same success, in my experience, and especially cases of puerperal peritonitis, of which twenty-seven have fallen under my treatment within the last fifty years, one only of the number have proved fatal. Therefore my faith in the judicious use of the lancet has never forsaken me during the protracted period of clamour which has so long existed against it.

It may well be asked, Why is it that within the last thirty years so great a revolution has taken place in the practice of medicine, and that teachers now almost universally reprobate abstraction of blood in the treatment of strongly marked congestions and inflammations? The answer appears to me to be this—that cases such as I have described scarcely ever are admitted into hospitals in the very early stages, and at the time when this remedy can be advantageously used; for in most cases many days have necessarily intervened from the day when the attack first came on to the day when thus admitted, and the time has gone by for the judicious abstraction of blood, and the stage of the illness has arrived when the repairing functions alone are to be considered and aided; and the patient has to be supported by tonics, cordials, and judiciously selected food. Another great impediment has stood in the way of the practice of judicious bleeding, which is the strong objection felt by patients against submitting to any, the most trifling, surgical operation, which has been allowed to guide the decision of medical advisers too frequently. And I fear that a third cause may be found in the incapacity and bungling in the performance of the operation felt by some unpractised hands.

If the abstraction of blood in all cases be so injurious, as many pathologists have taught, why is it that in so many cases of extensive hemorrhage, produced by natural causes, so little injury is known to follow?—as in epistaxis, in cases of vertigo, in which pints have been lost within a few hours, and fatal apoplexy has been averted; or in hæmatemesis, in cases of gastritis, when immense quantities of blood have been vomited, and nothing but the cure of the patient has been the result; or in cases of post-partum hæmorrhage or in miscarriages, where women have lost enormous quantities of blood, when the normal quantity has been soon restored, and no anæmic evils have after a time been left.

Clapham-road, London.

[*Copy.*]

16, Henrietta-street, Cavendish-square,
November 6, 1875.

Dear Mr. Mitchell,—I have carefully read your paper, which I herewith return to you.

I agree entirely with you in thinking that, whereas general blood-letting was, at one time, often employed too indiscriminately and in blameable excess, its subsequent almost total disuse was unwise, and in many instances disastrous.

The complete disuse was, in my judgment, a more serious mistake than over-use had been. At present, however, I see as you do, plain indications of a return to a better and more rational practice in respect of the employment of the lancet in certain acute forms of disease.

Believe me to remain, very truly yours,

J. T. Mitchell, Esq. Thos. Watson.

TINCTURE OF GELSEMINUM IN NEURALGIA.

Dr. Spencer Thompson extols (*Lancet*, Nov. 6, 1875) the beneficial effects of tincture of gelseminum in neuralgic pain of the jaws generally, and of the teeth and alveoli more particularly. He gives it in doses of twenty minims, and if this does not afford relief in an hour and a half or two hours, he repeats the dose. He has rarely had to order a third dose.

DRUNK OR DYING?

THE CHIEF CAUSES OF COMA, AND THE DIAGNOSTIC MARKS OF EACH VARIETY.

BY DR. GEORGE JOHNSON, F.R.S.,

Professor of Medicine in King's College, Physician to King's College Hospital.

The attention of the profession and of the public has lately been directed in an especial manner to the means of distinguishing drunkenness from apoplexy and other forms of sudden coma. When I am addressing my pupils on the subject of apoplexy, I am in the habit of referring to the difficult question of diagnosis in the terms of the following extracts from one of my lectures:—

Diagnosis.—You are called to a patient in a state of insensibility; you know nothing of his previous history, except that he has been found unconscious in the street, and you are required to ascertain the cause of his alarming condition. You must first consider what are the *possible* causes of the symptoms. He may have a clot of blood in his brain, the result of disease or a blow on the head; he may be in that comatose condition which not unfrequently follows an epileptic fit; he may be poisoned by opium or by an excess of alcohol; or he may be suffering from the effects of uræmia.

Now, you will be less likely to make an erroneous diagnosis if you continually bear in mind that in some of these cases an accurate diagnosis is not only extremely difficult, but absolutely impossible until the progress of the symptoms has been watched for a certain time. That the case is one of cerebral hemorrhage would be rendered probable by such symptoms as extreme relaxation or convulsive twitchings of the limbs on one side, lateral deviation of the features, or inequality of the pupils; but with hemorrhage on the *surface* of the brain none of these paralytic symptoms may be present. Marks of internal injury, especially about the scalp, should be carefully looked for in every case. A black eye or a cut or bruised scalp may have resulted from a drunken man falling down, but the fall may have fractured his skull or ruptured a blood-vessel in the brain.

That the coma is a sequel of an epileptic fit might be suspected if it were found that the tongue is bitten and bleeding, and if there are hemorrhagic spots beneath the conjunctivæ or the skin; though these signs are frequently absent in epileptic cases. Epileptic coma is usually of short duration, and the speedy return of consciousness removes any doubt that may have existed as to the nature of these cases.

In cases of poisoning by opium, one of the most striking and constant symptoms is extreme contraction of the pupils. The skin, too, is usually bathed in a profuse perspiration. With respect to the contraction of the pupils, it has been observed that in cases of apoplexy with hemorrhage into the pons Varolii the pupils have been as much contracted as in opium-poisoning.

When the patient's breath is tainted by the odour of some alcoholic liquor, we of course suspect that he is drunk. It must not, however, be forgotten that as a drunken man is especially liable to be seized with apoplexy, and to suffer from accidental mechanical injury in the streets of a crowded city, so we may have to deal with the complication of alcoholic intoxication and cerebral hemorrhage on a fractured skull. It is a common practice to give brandy or some form of alcoholic stimulant to anyone who has become faint or giddy, and so it may happen that an unconscious patient's breath is tainted with the odour of drink administered after an onset of apoplectic seizure.

In cases of uræmic coma the urine is usually albuminous, and presents other physical and chemical signs of renal disease. Uræmic coma, in a large proportion of cases, is preceded by convulsions. The tongue is commonly brown and dry in these cases, and the breath has a most peculiar and characteristic fetor. Yet, even with all this evidence of renal disease, the case may not be one simply of uræmic coma; there may, in addition, be the complication of cerebral hemorrhage, which, as we know, is a frequent result of chronic Bright's disease.

The difficulty of diagnosis between renal disease and drunkenness is sometimes increased by the fact that the urine may be rendered temporarily albuminous by alcoholic intoxication. A remarkable case of transient alco-

holic albuminuria occurred when my friend and colleague Dr. Baxter was House-Physician to the Hospital. A man between twenty and thirty years of age was brought in one night by the police. He was unconscious, and breathing stertorously. He appeared to be drunk, and a large quantity of vinous liquid was pumped out of his stomach. The unconsciousness continued, and it was then suspected that he might be suffering from uræmic poisoning. This suspicion was confirmed by the fact that his urine, drawn off by a catheter, was "loaded with albumen." He was then put into bed, cupped over the loins, and a purgative was given. When Dr. Baxter visited the ward the following morning, he found the man up and dressed, and clamouring for his discharge. He said that he had been very drunk overnight, but now he had nothing the matter with him; and he passed some urine which was found to be in every respect quite normal. The temporary albuminuria was the result of renal congestion caused by the excretion of an excess of alcohol through the kidneys.

In all doubtful cases of this kind it is better to err, if you err at all, on the side of caution and safety. Obviously it is better to allow a drunken man to recover his senses in the ward of a hospital than to send an apoplectic patient to die in the cell of a police-station. When a mistake is made on the opposite side, and a supposed drunkard dies apoplectic, it is a very natural, though it may be a very erroneous inference, that some one is to blame and deserving of punishment. — *Medical Times and Gazette.*

The *Medical Circular* states that a patient, suffering from inflammation in the chest, recently submitted his expectoration to a scientific authority. The practitioner consulted wrote back :—"It is evidently of parasitic nature, but with respect to the precise individuality of the entophyte I have not yet decided quite to my satisfaction. My mind still hovers between two conclusions, viz., as to whether it is an aborted specimen of a cyclocotuloid macromalacoidium, or a highly developed cryptococceous megalocyst of a strongylopleuron batracholeucocopridon."

ON THE USE OF QUININE AS A GARGLE IN DIPHTHERITIC, SCARLATINAL, AND OTHER FORMS OF SORE THROAT.

BY DR. DAVID J. BRAKENRIDGE,

Assistant Physician to the Royal Infirmary, Edinburgh.

Since Binz published his famous experiments, showing the action of quinine on the white corpuscles of the blood, numerous authorities have confirmed and extended his observations. The following facts, among others, may now be regarded as established :—

1. Quinine is a protoplasm poison, and limits the number and movements of the white blood corpuscles and pus cells.

2. It prevents the pathological migration of the blood corpuscles into the tissues of the membranous and parenchymatous organs exposed to the air, both when it is given subcutaneously and when it is directly applied to the part.

3. It restrains the dilatation of the blood-vessels.

4. It is an antiseptic, and exerts a paralysing, or, in larger doses, a destructive influence on microzymes.

With these facts in view, the theoretical appropriateness of quinine as a gargle in diphtheria with abundant proliferation of micrococci, and in scarlatinal, and various other forms of sore-throat, especially when attended with membranous exudation, pultaceous secretion, or ulceration, is apparent. For it antagonises all the visible factors of such forms of inflammation.

Before employing it for this purpose, I was familiar with the use of solution of quinine as a dressing in bed-sores and other tedious ulcers. The marked diminution in the secretion of pus and the rapid improvement which I observed to take place in these cases when so treated, first led me to anticipate good results from quinine as a gargle.

For the last four months I have treated every suitable case of sore-throat that I have met with in my wards in the Royal Infirmary and elsewhere, with a gargle composed, as a rule, of two grains of sulphate of quinine and five minims of dilute sulphuric acid to each ounce of water. Sometimes I have been able to increase the strength; sometimes I have

been compelled to diminish it. When well tolerated, the stronger it is the better.

The results I have obtained fully confirm my favourable anticipations. From a considerable number of cases I draw the following conclusions :—

Simple non-syphilitic ulcers of the throat, under this treatment, at once assume a healthier aspect and heal rapidly.

In syphilitic ulcers, the local treatment has always been accompanied by the internal administration of iodide of potassium, or some other suitable constitutional remedy; but my impression is that, in these cases, the cure is hastened by the quinine gargle.

Its effect in the sore-throat of scarlatina is very marked, the pultaceous secretion being checked, and the inflammatory swelling diminished.

It is of comparatively little use in the early stage of cynanche tonsillaris, over which tincture of aconite, in minim doses frequently repeated, has so decided a control. When, however, abscess followed by abundant discharge of pus results, its beneficial influence in checking the suppuration and promoting healing is marked.

In the slighter forms of diphtheritic sore-throat it answers admirably, preventing the extension of the disease, and promoting the separation of the membranous exudation.

It is, however, in severe cases of true diphtheria that I hope it will prove most useful. I have now employed it in three cases of this disease, and in all the result has been highly satisfactory.

Dr. Brakenridge then gives the history of a typical case of diphtheria, which he describes as one of "*unusual severity*," and in which this mode of treatment was adopted after having tried chlorate of potash and tincture of the perchloride of iron internally and Condy's fluid as a gargle without any perceptible improvement to the patient. His formula was as follows :—

℞. Quiniæ sulphat, gr. xviii.; acid. sulphur. dilut. *m* xlii.; aquæ ad ℥ vi *M.*

This prescription was alternated every half hour with Condy's fluid, and the patient afterwards did well and made a complete recovery from the primary disease by the 13th day after the first attack.

I have found the quinine solution useful as a wash in aphthæ, stomatitis, and other affections of the mouth; but my experience of it in these cases has been limited by the difficulty attending its use in childhood, owing to its very bitter taste.—*Practitioner*, August, 1875, p. 110.

SYPHILITIC PHTHISIS.

Fournier sums up in the following four axioms the conclusions he has reached on this subject :

1. Tertiary syphilis can produce in the lungs lesions which, either locally or by re-acting on the general health, simulate pulmonary phthisis.

2. These pulmonary lesions of syphilis are often amenable to specific treatment; however grave and important they may appear, they are far from being always beyond the resources of art.

3. Consequently, when a case of pulmonary lesion presents itself, it is important, unless the existence of tuberculosis be quite certain, to ascertain if the lesion can be traced to syphilis. It is necessary always to bear in mind that syphilis is a possible cause of pulmonary lesions.

4. When syphilis can be suspected to be the cause, the primary indication is to prescribe specific treatment, which in similar cases has sometimes been followed by the happiest results.

In making a differential diagnosis, Fournier relies mainly on the syphilitic lesion being unilateral, circumscribed, and without predilection for the summits of the lungs. It generally affects a portion of the lung not more than a few centimetres square, constituting a little islet of disease surrounded by healthy lung-tissue. When the morbid changes are far advanced in the circumscribed spot, the diagnosis of syphilis is pretty safe. The co-existence of a fair degree of health and *embonpoint* with advanced pulmonary changes, points to syphilis as the cause of the latter, as does also a slow development of the pulmonary lesion, the general condition remaining good. Of course, a close examination of the entire body for the ordinary symptoms of tuberculosis or syphilis must never be omitted. There is no hereditary transmission of pulmonary syphilis.—*N. Y. Record.*

THE RAPID RELIEF OF NEURALGIC PAIN.

Dr. Spencer Thomson considers that instead of the employment, as of old, of external applications to palliate suffering in neuralgic affections, employed with the hope that the disease might be conquered after a longer or shorter interval with quinine, carbonate of iron, arsenic, and other antiperiodics which were not always certain, we may now congratulate ourselves that a large number of cases of so-called neuralgia may be quickly, either permanently cured by the relieving remedy, such as phosphorus, or relieved, until such time as specially curative agents, or curative general treatment, have removed the tendency to the recurrence of the pain. As one of the newest of the remedies he first alludes to one which is much too slowly making its way into the domain of practical therapeutics—the recently introduced "tincture of gelseminum sempervirens," or yellow jasmine. In his presidential address delivered before the South Western Branch of the British Medical Association in 1874, he alluded to this remedy as having proved very successful in his hands, and in a paper he read this year at the Plymouth meeting he was able to state how fully it had fulfilled his expectations during the twelve months that had elapsed since his former notice of it. Directly or indirectly it had been used by him, or by his authority, in at least forty cases to which it was applicable, and with almost constant success. In using the word "applicable," he does so in accordance with his own experience that the remedial power of the gelseminum seems confined to those branches of the trifacial nerve supplying the upper and lower jaw, more particularly the latter, and more especially when in either jaw the pain is most directly referred to the teeth or alveoli; indeed, he can scarcely recall an instance of the above in which relief was not speedily and thoroughly given. The usual expression of the patient has been, "It acted like a charm." In illustration he gives one case.

On Sunday afternoon, June 20th, the housemaid of a friend, a retired medical man, came to him with a note from her master, stating that she had been suffering from agonizing pain of what was thought to be toothache, for six-and-thirty hours. Nothing gave relief, and no dentist could be found to remove the only suspicious tooth. He sent her home with a bottle of gelseminum tincture, which he kept for home use, desiring that she should have twenty minims at once, and twenty more within two hours if not relieved. Her master sent him a note in which he stated that the patient had experienced immediate relief.

In the notices he has met with on the use of the gelseminum, the doses quoted seem all too small. Dr. Thomson now almost invariably prescribes for an adult twenty minims of the tincture as a first dose, to be repeated any time after an hour and a half if relief is not given. He has rarely had to order a third dose, and he has never found any inconvenience result from the larger doses. In one instance, a gentleman who, unadvisedly, took thirty minims at once, and immediately afterwards went out driving, told him he experienced for an hour or two some uncertainty of vision when guiding his horse. A severe attack of neuralgia of the jaw was, however, cured by the one dose, and did not return.

After referring to the solution of Calabar bean, to the tincture of actæa racemosa, and the nitrite of amyl, Dr. Thomson concludes by saying that, with morphia, and occasionally—but only occasionally—atropia, to use hypodermically, with phosphorus in solution, with gelseminum, aided at times by the ordinary external appliances, such as heat, or freezing if need be, aconite, and chloroform, one ought to feel fully prepared to meet and subdue at the time most cases of neuralgic pain, and, indeed of pain generally.—(*Lancet.* December 1875.)

An ancient medical manuscript, discovered some years ago among the bones of a mummy, and lately purchased by Dr. Ebers, a German archæologist, is talked of. It is believed by the learned to be one of the lost Hermetic books, and about contemporaneous with Moses. It is not yet completely translated, but is expected to throw some light on the practice of medicine in those remote centuries.

THE USE OF ALCOHOL.

It is not surprising that the extent to which alcohol is employed in our hospitals and infirmaries is occasionally the subject of questioning scrutiny by the lay authorities. There exists a very widespread belief that doctors are, as a rule, prone to the indiscriminate administration of stimulants, and that the amount of alcohol they order is in many cases far beyond the real need. Possibly there has been in the past some justification for the charge. The wave of stimulation which swept, with Dr. Todd's influence, over medical opinion, may here and there have carried the practice to an injurious degree, but we believe that the recoil has left little room for criticism, and that the great bulk of the members of our profession entertain and act upon a very just estimate of the time at which and extent to which alcohol should be given. But the annual consumption of wine and spirits in a hospital in which a large number of acute cases are treated makes a formidable figure in the total expenditure. It is not, therefore, surprising that the governors of the Newcastle Infirmary, on finding that the annual consumption of alcohol in their wards was at the rate of something like 1000 bottles of wine and 400 bottles of spirits, wished for a careful report on the subject by the Medical Board. This was recently supplied, and its assurance that the employment of alcohol has been strictly regulated by the needs of individual cases was satisfactory to the authorities, although it appears to have been a matter of not unreasonable regret to some that alcohol should be necessary to cure the mischief which alcohol had had so large a share in producing. The Newcastle Infirmary is a large institution, a considerable number of the cases treated are of great severity, and the amount of stimulants we have mentioned corresponds only to an average of something like two-thirds of a bottle of wine and one quarter of a bottle of spirit for each patient during the whole of his stay in the hospital; certainly a very moderate amount.

A still more simple justification was available for Dr. Roe, of Ellesmere, in reply to a foolish circular on the needlessness of stimulants in acute disease, sent to him by the guardians of the parish. The total cost of stimulants for the sick poor under his care had amounted to $2\frac{1}{4}d.$ per head per week. In a very sensible letter he points out the fallacies on which the hasty conclusion as to the needlessness of stimulants had been based, and urges, with great point, that the judicious use of alcohol, by lessening the period of convalescence, effects a direct saving to the guardians of the poor, which must often far more than counterbalance the prime cost of the stimulants. We are glad to see that the letter carried conviction to the guardians to whom it was addressed.—*London Lancet.*

BACTERIA FOUND IN THE PERSPIRATION OF MAN.

Dr. Eberth, of Zurich, Switzerland, has found, says the *Medical Record*, by the aid of the microscope, in the sweat of the face some corpuscles which he considered as bacteria. This view became confirmed when he examined the axilla, breast, and inner side of the thigh of several persons in a state of perspiration. The sweat of these parts contained nearly always enormous numbers of bacteria. In most cases they originated from minute bodies found upon the hairs in the mentioned regions, forming little nodules on them, and giving them a grayish or a brick colour. They were recognized by the author as accumulations of micrococci. They may rapidly increase in number, are smaller than the diphtherial micrococci, and are nearly indifferent to re-agents (concentrated acids, alkalies, alcohol, ether, chloroform). Iodine colours them yellow. The vegetation of bacteria on the hairs may be observed in cases where they are changed already, beginning in places which have clefts between their cells. The vegetation occupies large spaces, especially in the direction of the longest diameter of the hair.

Dr. Eberth observed a mycelium and micrococci, and thinks that the latter are the fruits of the former. Other investigators observed coloured sweat, red and blue, which contained micrococci. It was difficult to decide in these cases if the colouring matter was adherent to the micrococci, or if it was a product of the vegetation.

ERGOT IN HÆMOPTYSIS.

Dr. Jas. M. Williamson states (*Lancet*, Nov. 13th, 1875) that he has administered ergot in fifty cases of hæmoptysis occurring in different stages of phthisis. The amount of hemorrhage varied from abundant bright streaks on the sputa, to the expectoration of several ounces of blood. As the cases all occurred in hospital practice, very little time was lost between the advent of the hæmoptysis and the exhibition of the remedy. The ergot was invariably given by the mouth and in the form of the liquid extract. Much has been said about the success of the subcutaneous injection of ergotin and its superiority to this plan, but since there was no difficulty in any of the cases in administering a draught, and as the drug acted in most instances with a promptitude which was sufficiently satisfactory, the hypodermic method was not employed. Forty-minim doses of the liquid extract may be given twice within the first hour, and guided by the results, at least every two hours afterwards, the dose being diminished and given less frequently as the hemorrhage subsides. He has never observed any disagreeable effect follow, even upon the administration of large quantities within short periods, but, as a general rule, if four or five full doses make no distinct impression upon the hemorrhage, the remedy should be abandoned for another. Care should be taken to use a sound and fresh preparation of the ergot.

Out of the 50 cases the drug rapidly checked all bleeding in 44 instances. Of these, 16 were women and 28 men, and in at least one-fourth of the number the hæmoptysis merited the term profuse. In forty of the forty-four cases it was the first and only remedy given; in two others it was successful after a mixture containing gallic acid, alum, and dilute sulphuric acid failed; in another it was effectual after acetate of lead with opium proved useless; while in the remaining instance it repressed the bleeding after both of these plans were unavailing. The ergot was ineffectual in six cases.

In three of the cases of failure gallic acid equally failed. Over gallic acid ergot has the distinct advantages of never causing griping or constipation, and more especially of not interfering with a liberal use of milk. The larger portion—equivalent to 88 per cent.—of the cases in which ergot succeeded, not only testifies to its great value and claims for it our confidence, but also strongly justifies the recommendation that it should be the first drug tried in all cases of hæmoptysis.

RENAL TUBE-CASTS IN NON-ALBUMINOUS URINE.

Dr. Finlayson, of Glasgow, in an original communication to the January number of the *British and Foreign Medico-Chirurgical Review*, after discussing several cases of tube-casts occurring in non-albuminous urine, makes the following remarks :—

Tube-casts are almost invariably found in marked cases of jaundice, and as a rule this occurs without albuminuria. In showing some typical specimens of this class to the Glasgow Pathological and Clinical Society in May, 1874, I stated that, so far as I had then examined the subject (twelve cases), my observations confirmed those of Professor Nothnagel as to the almost invariable presence of tube-casts in the urine if it were deeply jaundiced, and as to the absence of albumen in about two-thirds of such cases. Since then other cases have come under my notice, and further observation confirms the statement made. The cases observed included many varieties of jaundice, so that one is forced to the conviction that the tube-casts are due to the jaundice itself, and not the special diseases producing it. In view of the facts and cases adduced in this paper, one is led to look for some mechanical (or, perhaps, some chemimal) irritation of the renal tubules as a possible explanation of the presence of tube-casts thrown off in jaundice. When we remember that renal calculi and gravel, and even hedgehog crystals of the urate of soda give rise to, or at least are the only obvious cause of, tube-casts in the urine, and that such casts are found with the minutest possible traces of albumen, and, indeed, as we have seen, sometimes without any trace at all, we seem to have before us an analogous phenomenon. For in the sediment of jaundiced urine we find, at times, little coloured particles composed, apparently, of the biliary colouring

matter; a similar material has been found after death in the tubules of the kidneys themselves. Frerichs, in his chapter on Jaundice ('Obs.,' vi), speaks of the urinary sediment containing "brownish-black angular granules," and in the post-mortem report of the same case he says, "the little tubes were filled with a black brittle material," and that "nitric acid produced, in most of them (the deposits), the play of colours known to be characteristic of bile-pigment." It is worthy of remark that, in this case, although the secreting functions of the kidney were essentially impaired by the morbid process, no albumen had been found in the urine. These particles, perhaps from their size, perhaps from their nature, no doubt cause much less irritation than the renal calculi or gravel to which I have ventured to compare them, for we do not find hæmaturia to be one of the facts in jaundice; but they may suffice for the production of tube-casts, although they do not cause hæmorrhage, and but seldom albuminuria, just as the cases of renal irritation already detailed exhibited all the transitions from a profuse hæmaturia to an almost imperceptible albuminuria, or even to a total absence of any evidence of blood or albumen in the urine in which the casts were found.

NITRITE OF AMYL IN ASTHMA.

BY J. J. LEISER, M.D.

The following report of cases may be of interest:

Mrs. G., aged 40, for several months had her sleep interrupted regularly at 4 o'clock A.M., and was compelled to sit up the remaining part of the night in agonizing efforts at breathing. Large doses of quinine had some influence over the paroxysms, and when fully under its influence she would escape one or more nights. It began finally to lose its influence, and I gave her the amyl. The first use of it seemed to fail, but only because she did not inhale freely enough of it. The second night it was administered until the prominent effects became apparent—fulness and flushing of the face, throbbing sensation of the temples, etc.—when she experienced immediate relief, and returned to sleep at once. After a short use of it her spells left entirely, but I attribute such results to the season.

Mr. M., aged 15, came into my office suffering from a severe attack of asthma. I gave him five drops of nitrite of amyl to inhale, with immediate relief. This patient was afflicted with severe paroxysms of asthma on every occasion of a slight cold, and it now requires that at such times he shall take several inhalations daily and at bed-time, by which he can shield himself effectually from distress. Is is the only remedy which, after a search of years, has proven satisfactory. He uses five to ten drops.

Mrs. R., aged 60, simple paroxysmal asthma. She has become accustomed to the use of nitrite of amyl, and inhales it direct from the bottle—enough to cause some of the effects of the remedy, which always disperses the asthma and leaves her comfortable. She considers her bottle of amyl her nearest companion.

I have given the amyl salt in a number of cases, and in only one has it failed; in this I think the patient did not use it effectually, as she was completely prejudiced in favour of an asthma specific, which usually relieved her.—*Med. and Surg. Reporter.*

SURGEON-MAJOR THEOBALD RINGER, M.D., reports a curious case of incessant hiccough in the *Indian Medical Gazette* for December 1st. The patient, a native trooper, was admitted into hospital for a severe attack of secondary syphilis (rupia), and treated with the bichloride of mercury. At the end of five weeks he was seized with hiccough, which continued with little cessation for five days, in spite of the exhibition of chloroform, hydrate of chloral, sinapisms, subcutaneous injections of morphia under intercostal muscles, belladonna plaster to epigastrium, and calomel, in one large dose. On the sixth day a blister was applied to the origin of the phrenic nerve, and he was given extreme doses of iodide of potassium every six hours, and a full dose of quinine once a day, with iced soda water to drink. This treatment was carried on for eight days, the hiccough becoming daily less frequent, until on the tenth day it entirely stopped. The dose of iodide of potassium was gradually reduced as improvement took place, and on the twenty-third day the man was "discharged to duty."

Surgery.

CLINICAL LECTURE ON THE DIAGNOSTIC VALUE OF THE ILIO-FEMORAL TRIANGLE IN CASES OF INJURY OF THE HIP-JOINT, MORE PARTICULARLY OF IMPACTED FRACTURE.

BY THOMAS BRYANT, F.R.C.S.

The interest that is attached to the subject of injuries of the hip-joint, the difficulty that occasionally attends their diagnosis, and the injury that is too often inflicted upon a patient, in the attempt to make out a difficult case, are some of the reasons that have induced me to bring before your notice on the present occasion, a means of diagnosis in these cases that I have long employed and taught, although I may not have formulated it before the present year. I have described the means in this paper as the ilio-femoral triangle, and I have done so because the triangle is formed between the ilium and the femur. The lines which form it are readily made out, and any shortening of the one which I have called the base and to which I am about to draw your special attention, can be easily detected. The triangle is formed as follows, and is a right-angled triangle. One side of the triangle is formed by a line drawn from the anterior superior spinous process of the ilium to the top of the trochanter major. The second is drawn from the anterior spinous process of the ilium, directly downwards to the horizontal plane of the recumbent body. And the third, which is the base of the triangle, is drawn at right angles to the second line and falls upon the first line, where it touches the great trochanter. It is to this line my observations refer. The first line, it will be seen, corresponds, in part, to Nelaton's well-known line, which is drawn from the anterior superior spinous process of the ilium to the most prominent part of the tuberosity of the ischium. This line in the normal position of the head of the femur touches the upper border of the trochanter major in every position of the limb, and I believe that if this line is to be considered to be the test line for dislocation of the head of the femur backwards—which I take it to be —I must claim the base of the triangle I have described to be the test-line for the fracture, or shortening of the neck. At any rate I can confidently assert, after repeated proofs, that whilst in a healthy subject these ilio-femoral triangles are exactly similar upon the two sides of the body, with equal sides and equal angles, I can, with equal confidence, assure you that in all cases of injury to the hip in which shortening of the neck of the thigh-bone exists, the amount of shortening can readily and accurately be made out on comparing the bases of the triangles on the two sides. That in impacted fractures of the neck of the thigh-bone, where on the sound side the base of the triangle will, in the adult, measure its average normal length of two and a half inches, on the affected or injured side, it will measure from half an inch to more than one inch less. These measurements being taken with the patient in the horizontal position, the pelvis straight and the two femora parallel.

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In practice the line is easily made out and the test as to shortening of the neck of the femur readily applied, and with these facts before us, the value of the means for diagnostic purposes can hardly be disputed. In my own hands the test line has helped me much in many difficult cases, and in the hands of my dressers it has been of no less value, for it has enabled them to diagnose with facility, and without dangerous manipulation, many cases of impacted fracture of the neck of the thigh-bone that would otherwise have been overlooked, and to a certain extent, would have been roughly and injuriously handled. By means of this line I maintain the diagnosis of an impacted fracture of the neck of the thigh-bone can, as a rule, be made out with facility and certainty; and that in a large number of obscure cases of injury to the hip the doubts and difficulties that were formerly experienced may be exchanged for the confidence of accurate knowledge. I do not mean, however, to say that by means of this test line all obscure cases of injury to the hip-joint can be cleared up, for such an assertion would not be true; but I would wish you to believe what I have found to be the case—that by its use a large number of cases, that would have been called obscure, have ceased to be so. It is true

there may be some shortening of this line in fracture of the great trochanter, and it is likewise possible that there may be no shortening of the line in some cases of impacted fracture; but these cases are exceptional, and they in no way tend to diminish the diagnostic value of the means I have to-day brought before your notice, in the majority of cases of fracture of the neck of the thigh-bone, and in all cases in which shortening of the neck of the femur may be found.

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During the last three years, at least 16 consecutive cases of fracture of the neck of the thigh-bone have been admitted into my wards, and all these 16 left them with good union of the broken bone and useful limbs. You must know, also, that all these patients were advanced in years, the youngest having been fifty-nine, and the oldest seventy-eight, the average age of the 16 having been seventy-four. The injured patient was simply placed on a firm bed with his pelvis brought to a right-angle with the spine and his lower extremities slightly extended; a tape was then allowed to fall from the anterior superior spinus process of the ilium of one side to the horizontal plane of the body, and a second tape employed to measure the distance between this vertical tape and the upper border of the great tronchanter on the same side. (This horizontal line forming the test line.) Similar measurements were taken on the opposite side. The two lines on the respective sides were then compared, and when no difference was found between them, it was generally assumed that no fracture of the neck of the femur existed; but when the test line on the injured side of the body was found to be shorter than the other, and this shortening had taken place after a direct injury of the hip, the inference was drawn that there was some shortening of the neck of the thigh-bone, and that this shortening was probably due to a fracture; the amount of shortening in the neck of the bone being fairly represented by the amount of shortening in the test of line of the affected side. In many cases no tapes were used, the index finger of one hand being employed to represent the superior vertical line, with its tip placed upon the anterior superior spine of the ilium, and the index finger of the opposite hand as the horizontal test line, the thumb marking off upon the index finger the distance between the vertical line and the top of the trochanter.

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—*London Lancet, Jan.* 22, 1876.

TREATMENT OF PORRIGO, TINEA FAVOSA, ETC.

BY DR. HENRY MACCORMAC.

[The results of treatment for parasitic cutaneous diseases are often disappointing, but Dr. Maccormac has found much more satisfactory results from petroleum than from any remedy previously tried.]

The first thing I do, the scalp being concerned, is to clip or, where it can be done, or as far as it can be done, shave the hair closely off, and keep it so. In cases that have been neglected, it will be desirable to premise a few simple poultices, bread or linseed meal. I direct the petroleum to be applied twice daily, by inunction, in the form of one part petroleum to two of lard and a few drops of oil of lavender or, say from half a pint to a pint of petroleum in a pound of lard, with twenty drops of oil of lavender. The vessel or jar which contains these, may be stood in a basin of boiling water, occasionally renewed, stirring with a wooden spatula until the whole is intimately blended.

This unguent is to be applied, gently but thoroughly, once or if it be practicable, twice daily. A soft brush is a very good implement to use, and the ointment when about to be applied, may be moderately warmed beforehand by standing the cup or gallipot, which contains it, in hot water. Judgment must be used in apportioning the strength of the ointment and the amount of the application to the state of the parts and the irritability of the subject. After the application a piece of dry soft clean linen rag may be laid on—an old cambric handkerchief answers very well—and over all, a soft clean linen cap.

Before the next application of the petroleum ointment, the head must be thoroughly but gently washed with black or fish soap and fresh warm soft water. The ointment is then to be reapplied as before. Every rag or cap, once

used and past further use, should be thrown into the fire, but if intended for further use, plunged in a hot soda lye, and after being well washed, finally rinsed in water containing a little carbolic acid.

The last instance of porrigo which I had to deal with, was in a cutler's daughter. Her case was rather a distressing one, with many sores, the hair had mostly disappeared, and there were vermin as well. The very first application proved advantageous, and the patient did well in every respect, except as to regaining her hair, afterward. The family have removed, and I cannot speak of the young woman's present state, but I have no reason to doubt but that it is satisfactory.

In a recent case of trichophyton tonsurans in a youth of eighteen, a large patch of hair, producing great disfigurement, was absent. I must here observe that I had begun with pencilling a weak alcoholic solution of corrosive sublimate over the parts. I then had recourse to the petroleum ointment and black soap. The case, after some continuance of treatment, has done extremely well. A vigorous growth of hair now covers the previously denuded surface. A preceding case of trychophyton occurred in a pretty young Jewess. A naked patch rather larger than a crown piece, subsisted at the very vertex. The young lady has since married, and the vertex, when I saw her last, bears no trace of having ever been wanting in respect of its hairy covering.

I wish to add that the petroleum ointment with black soap, is an excellent remedy in itch, removing it with ease and safety. It is a capital remedy for lice, destroying them on the pubis, in the axilla, or on the head. In two or three instances where these hideous vermin had extended over the whole surface, the petroleum ointment with black soap and the warm bath, employed twice daily, removed them with magical celerity. In insane persons, whereon vermin often house, petroleum ointment and soap proves most useful. So far as I have had an opportunity of trying it, I find the petroleum alike serviceable in the mange of dogs, swine, and horses, destroying the minute parasites along with the cutaneous affections which they engender.—*Practitioner.*

ON THE HYPODERMIC TREATMENT OF INDOLENT ENLARGEMENTS OF THE CERVICAL GLANDS.

BY DR. MORELL MACKENZIE.

Physician to the Hospital for Diseases of the Throat, London.

Indolent glandular enlargements should be either cured radically or left altogether untreated. Half-measures only give rise to disappointment and cause disfigurement. An enlarged gland may be a slight blemish, but when it has been blistered, poulticed, painted with iodine, incised, or subjected to any of the various modes of treatment recommended in such cases, it often becomes a deformity.

As a rule, parents and young ladies are very desirous to get rid of these glandular swellings, not only on account of the disfigurement which they occasion, but because they are regarded as blots on the family escutcheon. It becomes important, under these circumstances, not only to disperse the tumours, but to leave behind as slight traces of their previous existence as possible. For the last eighteen months I have been engaged in trying various remedies, hypodermically, with a view of curing indolent glandular swellings. I have tried solutions of pepsine with and without dilute hydrochloric acid, dilute hydrochloric acid alone, dilute acetic acid, tincture of iodine, alcohol, solution of nitrate of silver, solution of chloride of zinc, and several other remedies.

In carrying out hypodermic treatment the cure may be effected either by resolution or by destruction. In the former case absorption takes place; in the latter the injection is followed sooner or later by suppuration. It is desirable, if possible, to cure by resolution. I have found acetic acid, as recommended by Dr. Broadbent for the treatment of certain kinds of cancer, the most useful remedy for this purpose. With this agent I have treated twenty-seven cases; of these fifteen were completely cured by resolution, four were greatly benefited, in five suppuration took place, and three patients discontinued treatment without any decided effect having been produced. I have used the ordinary dilute acetic acid of the British Pharmacopœia, and have generally injected from five to twenty drops, according to the size of

the gland to be treated, seven or eight drops being an average dose. The injection should not be made more than once a week. The fluid should be injected well into the middle of the gland. Suppuration has generally resulted from the solution having been injected either too frequently or too superficially. If suppuration take place, the fluid should be drawn off with a hypodermic syringe or aspirator. The average duration of treatment by resolution is three months.

For treatment by destruction and suppuration, a solution of nitrate of silver answers best. The solution should be of the strength of one drachm to the ounce, and not more than three to five drops to be used. Considerable interstitial destruction is generally produced after three or four injections, sometimes after a single injection. When pus forms, it should be drawn off as already directed. Treatment by destruction, if successful, is rather more rapid than that by resolution, but induration of the outer portion of the gland sometimes follows the treatment, and interferes with its success. I have treated five cases in this way; in three of them the cure was complete, in two incomplete. The treatment by pepsine and dilute hydrochloric acid was rapid, but was twice followed by superficial sloughs of the skin, and for that reason I abandoned it.—*Medical Times and Gazette.*

Medical Diplomas for Women.—The *British Medical Journal* states that the Council of the Royal College of Surgeons of England has arrived at the important decision to admit women to examination for its licence in midwifery. This diploma will entitle them to a place on the *Medical Register*, and will give them a legally recognized position in this country as practitioners in the obstetric department of medicine and surgery. The clause in the College Charter under which the right to admission has been claimed was, it appears, expressly framed by the use of the word "persons," to meet the case of female as well as of male practitioners; and the College has been advised that it could not legally refuse to admit duly educated women to examination for this diploma.

THE USE OF LIQUOR BISMUTHI FOR HÆMORRHOIDS AND PROLAPSUS ANI.

BY JOHN CLELAND, M.D., F.R.S.

Professor of Anatomy and Physiology, Queen's College, Galway.

While it may be freely admitted that in many instances hæmorrhoids cannot be treated successfully without surgical operation, and while, for my own part, in a considerable experience I have always had good reason to be satisfied with the results of the operation recommended by Mr. Syme, it is evident that in a large number of cases operative interference is unsuitable; in others the affection, however ameliorated by such interference, remains uncured; and it is desirable that whenever it is possible, a cure should be obtained without resort to so disagreeable a measure. With this end in view I venture to say a few words on the use of liquor bismuthi given as enema.

My attention was first drawn to this remedy by a rather peculiar case of prolapsus of the bowel. A middle-aged woman came for consultation in such a condition that she could with difficulty walk, inasmuch as whenever she parted her thighs, the bowels emerged and hung down for about six inches, in folds of such a character as made it evident that at least half-a-yard of intestine was extruded. The whole surface of the mucous membrane exposed was a deep raspberry red, like those cases of hæmorrhoids which some practitioners delight to treat with nitric acid. This condition was chronic; external supports had failed; the possibility of removal of the whole prolapsed mass suggested itself, but such an operation attended with enormous risk was not to be thought of in the case of a patient enjoying a certain measure of health. Astringents had been tried and failed, and it seemed questionable if astringents were suitable remedies in such a case. It appeared much more probable that an irritated and congested condition of the mucous membrane led to a derangement of the action of the muscular walls than that in a strong woman, a local relaxation, involving sphincters and intestinal walls, had produced a prolapsus, which led to congested mucous membrane, from exposure. I recollected the relief frequently obtainable in

cases of hæmorrhoids, by application of white bismuth or oxide of zinc. In this case, however, ointment or powder obviously could not be effectully applied. But the liquor bismuthi in stomach affections has a soothing influence far superior to white bismuth. I therefore directed my patient to mix a dessert spoonful of liquor bismuthi with half a wine glassful of starch, and after getting into bed and returning the bowel to its place, to introduce this enema and retain it. I was much pleased, a few weeks afterwards, by my patient calling to tell me that she was nearly well, and to ask if she might continue the remedy. This she was ordered to do; and I have every reason to believe that she has had no return of her malady. I have since frequently used the same remedy for the ordinary prolapsus in children, with invariable and rapid success.

In severe hæmorrhoids there are usually three parts affected, the integument, the mucous membrane, and the hæmorrhoidal veins. Plainly the veins cannot be reached by local medicaments, and those comparatively few cases in which they alone are involved must be treated in other ways. The integument, together with the edge of the mucous membrane up to the grasp of the sphincter, is within easy reach, and may be treated in various ways according to circumstances. Thus, when the congestion is superficial and produces a catarrhal oozing, bathing with whiskey or other alcoholic lotion, a small pad of dry cotton wool firmly applied to soak up the moisture, and also zinc or bismuth in powder or ointment are all exceedingly useful; and when a congested surface within easy reach is accompanied with venous engorgement, tincture of iodine sometimes produces surprising effects, although in other instances it is too painful to be borne. But when the mucous membrane is considerably involved, I know no application to compare with injection of liquor bismuthi, which has the advantage of being painless; and as in the case of prolapsus narrated above, the improvement of the mucous membrane has a wonderful influence on both the veins and integument. In instances in which the necessity for surgical interference appeared indubitable, I have had the gratification of defrauding myself of the pleasure of operating, and of seeing the patient recover. This is the more gratifying, as the surgical treatment of hæmorrhoids labours under the disadvantage, that, no matter what be the particular operation adopted, it never removes the predisposing cause of the malady.

THE RELATION OF SOFT CHANCRE TO SYPHILIS.

Can a chancre which presented at one stage all the characters of a soft one subsequently become indurated? The soft sore results simply from pus contagion, this pus being more or less peculiar, and its peculiarities being due to its having originated in syphilitic inflammation. I have insisted that this pus may or may not contain the germ-matter of syphilis. Let me here insist upon the extreme importance to the reputation of the practitioner of the rule never to give an opinion as to the nature of a chancre until the incubation period is over. Patients will come to you with sores contracted a few days or a week or two before, and will expect you to be able to tell them whether or not they are likely to have syphilis. Now, there is never anything in the conditions which are either present or absent which will justify the most practised observer in giving any opinion at such a stage. It is very rare indeed that an infecting sore acquires any induration within three weeks of the date of contagion, and more commonly it is a month or five weeks. Until such induration takes place, nobody can tell whether it is coming or not. Let your rule be, I repeat, to give to your patient no opinion whatever as to his chance of escape until he can assure you that it is one month since his last exposure to risk. If the virus be introduced in a pure, or almost pure, state, then it is probable that in many cases the patient experiences nothing excepting, perhaps for a few days, a little red pimple, which disappears, and leaves him, as he thinks, quite well for another three weeks or a month. At the end of that time the part begins to itch a little, and again becomes red, and gradually within a week or so a well-characterised induration is developed. If, however, the contagion have been

effected by a mixture of contagious pus and specific virus, then you have a very different course of things. Within the first few days the contaminated part may inflame sharply, and an ulcer may result which will probably send the patient in great alarm to his surgeon. This sore is, of course, soft; it secretes freely, and its secretion may contaminate other parts, and you may have what are termed multiple soft chancres. You may inoculate it, if wished, on the patient's skin, and produce other similar sores, and thus prove that you have to do with a non-specific secretion. But all this does not prove that the specific poison is not there, and whatever may be the cause of these soft sores, whether easy to heal or obstinate, there remains the risk that the specific induration may ultimately be developed. Probably the worse the sore, the more inflammation, and the deeper the ulceration, the greater is the patient's chance that the specific virus may be thrown off; whilst if the sore heals in a few days the danger of true syphilis is considerable. We often, from patients who are the subjects of tertiary disease, hear the statement that the original sore healed in a week, and gave scarcely any trouble. Such cases are, I suspect, examples of the early healing of a conspicuous soft sore, which was followed some weeks later by an inconspicuous and unobserved hard one. It is becoming increasingly the rule of English practice to give mercury as soon as ever specific induration can be recognised; but it is quite possible that we may, in the future, go further than this, and think that it is best to prescribe this remedy for all sores occurring within a month of contagion. We should no longer do so under the impression which formerly prevailed, that it was necessary in order to make the sore heal, for we now know that the soft sore is not syphilis, and cannot be influenced by its specific. The reason for giving it would be the fear that the patient may be passing unnoticed through the incubation stage of a true chancre. The soft sore proves that he has been contaminated with venereal pus, and shows that it is not improbable that he may have received the syphilitic virus also. It is quite possible that the antidotal efficacy of mercury may be much greater in the early stage than in the later ones. I wish, however, to have it distinctly understood for the present that I am merely suggesting, and not recommending. I am often pressed by patients to allow them to take mercury on speculation for soft sores, but hitherto for the most part declined to do it; my reason being, that until some proof has been afforded that we have to deal with true syphilis, we have no data by which to determine the requisite length of treatment.—Mr. J. Hutchinson, in *London Lancet.*

IMPROVEMENT ON SYME'S OPERATION.

This modification of Syme's employed by Mr. Bell for three or four years, and practised in ten cases, he states (*Brit. Med. Journ.*, Oct. 2. 1875) will, he believes, "be found to give the advantages promised by Pirogoff's method, and yet to avoid the risk of recurrence of disease of bone in the portion of os calcis left in Pirogoff's operation.

"It is a very simple and slight modification and consists in leaving attached to the flap the periosteum of the posterior part of the os calcis, and instead of dissecting the soft parts alone off the bone, stripping along with them the whole periosteum. In the case of amputation for disease of tarsus in children, this is done with the most perfect ease. It adds to the chance of vitality of flaps, diminishes the risk of sloughing and number of vessels to tie, and gives the most excellent results. Especially if the patient be encouraged early to move his flap by means of the tendons which soon take on new adhesions, we find that a considerable power of moving the heel flap over the end of tibia is saved, and, in some cases, a deal of new bone is formed from the periosteum. So much so is this the case, that in one patient on whom I operated in 1874. it was hardly possible to persuade those who saw the stump, that it was not a portion of astragalus which had been left with the integrity of the ankle-joint preserved. As all the cases in which I have practised this modification have survived and been successful, I have not found any objection to it, nor had the opportunity of making any *post-mortem* examination.

"One case had to be taken down about the fifth day for secondary hemorrhage from the posterior tibial, yet I did not find that the presence of the periosteum implicated in any way the subsequent secondary union of granulations which healed the wound."

TREATMENT OF NASAL CATARRH.

Dr. William Porter, after giving a brief description of the anatomical disposition of the parts implicated in nasal catarrh, the forms, symptoms, and etiology of the disease, proceeds to consider the treatment that should be adopted, and states that there are four points to be considered. The *first* has reference to the predisposing cause, the constitutional cause which must be rectified. In the asthenic type, iodide of iron, or iodoform and iron, with cod-liver oil are generally indicated. The treatment of catarrh from syphilis is obvious. If there be ulceration, iodide of potassium with ammonia, and some form of tonic are called for, but if no ulcers exist, the bichloride of mercury in small doses, if persevered with, has no equal. These cases are much more manageable than those of scrofulous origin.

In the catarrhal diathesis which we have noted, the majority of cases seem to do well with some preparation of phosphorus. This, with the addition of nux vomica, has been useful in relieving obstinate constipation and nervous lassitude in patients of this kind.

In all these conditions, good food, rest and regular habits of life must be enjoined. The social enjoyment and happiness of the patient should not be neglected, but if possible improved, knowing as physicians must how great is the influence of the mind upon the nervous system, and of the nervous upon the nutrient.

Secondly.—The local cause of the catarrh must be removed. If there is a polypus it should be enclosed in a snare, or seized with the forceps, and be brought out. In the glandular hyperthophy mentioned, the part may be touched with nitrate of silver, by aid of the rhinoscope, and the more pendulous portions destroyed, whilst all that would irritate the nasal mucous membrane must be avoided or guarded against. But this alone will not suffice. The membrane is already hypertrophied and the secretion abnormal.

A *third* important item is to keep the part thoroughly cleansed, so as to remove all the adherent mucus and incrustations. Nothing does this better than a weak solution of common salt in tepid water. It is not enough that it should be used through the nasal douche. He thinks that the nasal douche should only be used by the physician himself, and that the solution should never exceed a drachm of salt to the pint of water; that the salt should be well dissolved, and that the pressure should not exceed that of a column of water of twelve inches. These requirements, if carefully attended to, will obviate any danger. That so few cases have been recorded in which injury from the use of the douche has occurred, amongst the thousands who daily abuse it, sufficiently attests its harmlessness if properly applied. This means, while valuable, does not reach the upper and sometimes the most important part of the cavity. An easy way of affecting this is to attach to the douche a tube with an aperture on one side, which may be passed into the nostril, through which a stream of the solution may be directed upward toward the part, or the tube may be attached to a nasal syringe. Dr. Rumbold recommends a catheter with numerous small apertures, through which a spray of air and water is sent with good effect. If the disease has become ulcerative, a deodorising solution of permanganate of potassium or salicylic acid may be used in a spray, after the cleansing.

Fourthly and last, but most important, is the local medication. If there are ulcers they may be touched with iodine in glycerine and water, with the addition of a little iodide of potassuim, or with weak solutions of nitrate of silver. The latter is most useful where there is thickening of the membrane. Hydrate of chloral directly applied answers a good purpose where the ulceration is sluggish. It may be used from five to fifteen grains to the ounce of the menstruum. Where the thickening is not marked iodine vapour does well. A few drops of a concentrated solution of iodine containing a little conium or lupulin may be placed in a Roosa's inhaler, and the vapour propelled by means of the double bulbs or a small bellows. This should be used for at least fifteen minutes each day. After a few applications of this vapour a free flow of serum is induced, which lessens the infiltration and its attendant symptoms. If there be deafness from narrowing of Eustachian tube, it may be sometimes much relieved if the vapour is passed along it by means of inflation by the Valsalvian method. In many cases the frequent use of a snuff composed of camphor, tannic, and salicylic acid is advantageous.—(*St. Louis Medical and Surgical Journal.*

Midwifery.

DOUBLE OVARIOTOMY PERFORMED FOR THE REMOVAL OF SOLID OVARIAN TUMOURS. — TRANSFUSION OF MILK FOUR DAYS AFTER OPERATION.

Dr. Thomas, in the *American Journal of the Medical Sciences*, gives the history of an interesting case operated upon by him in October last.

As the patient was already greatly enfeebled, and was steadily becoming more and more exhausted, I readily assented to her own desire and that of her friends, and agreed to perform ovariotomy without much delay.

On the 14th of October, at 3½ o'clock p.m., I proceeded to operate in the presence of Dr. C. C. P. Clark, of Oswego, Drs. Mitchell and Skene, of Brooklyn, and Drs. Hunter, Walker, and Jones, of New York. The patient having been etherized by Dr. Skene, and placed upon her back upon a table, I made an incision through the peritoneum extending from a point two inches above the umbilicus to the symphysis pubis. Through this the tumour, which was unattached, was removed. The pedicle, consisting of the right ovarian ligament, Fallopian tube, and extension of the round ligament, was secured in a clamp, but upon subsequent examination it was found to be so tense that I ligated and returned it to the pelvis.

Upon examining the uterus it was found to be perfectly normal, but the left ovary was as large as a bullock's kidney and lay behind the uterus, distending and occupying Douglas's pouch. This was removed like the right, and the abdominal incision rapidly closed.

The whole operation occupied thirty-six minutes. At its conclusion the patient was removed to a warm bed, hot bricks put to her feet, the room darkened, and perfect quiet enjoined.

The patient was left under the care of Dr. S. B. Jones, who, on account of her very enfeebled condition, remained with her constantly for the next five days, and to his watchfulness and care, I cannot but feel that the subsequent recovery of the patient was in great part due.

She was kept entirely upon the milk diet, taking this in very small amounts, and at intervals of three or four hours, and was quieted by small doses of morphia.

During the next thirty-six hours all went well, the temperature did not rise above 102 degrees, and the only anxiety which was felt in reference to her during this period was created by the fact that she could take very little food without vomiting, and that her pulse, the rate of which was 130 to the minute, was exceedingly small, feeble, and flickering. On Friday I saw her in consultation with Drs. Mitchell and Jones. On Saturday morning, just thirty-six hours after the operation, I received a telegram stating that a rather profuse uterine hemorrhage had come on, and that the patient had lost ground decidedly in consequence. At ten that morning I saw her, and the condition of affairs looked decidedly unpromising. The pulse was so rapid and weak that at times it could scarcely be felt, and the patient began to vomit everything that was put into the stomach, even small pellets of ice. The foot of the bedstead was elevated twelve inches, cold was applied to the vulva, and the patient kept perfectly quiet. From this time nourishment was given by the rectum alone.

On the evening of that day I was forced to go to Rhinebeck, from whence I could not return before the evening of the following day. At eleven o'clock that night I received a telegram from Dr. Jones, stating that the uterine hemorrhage had recurred so violently that with the assent of Dr. Mitchell he had used a vaginal tampon, and that the patient was sinking so rapidly that she would die before morning. Reaching home late on Sunday night I found that death had not occurred, and early on Monday morning I went to Brooklyn to see her.

On this visit I found everything looking very badly. Both stomach and rectum rejected all nourishment; the temperature was only 102 degrees, but the pulse was small, flickering, and beating at 140 to the minute. It was agreed that very small amounts of fluid food should be cautiously tried by stomach and rectum, and, as the patient appeared to be dying from sheer exhaustion, the result of previous enfeeblement

by the disease, and more recent starvation and loss of blood, that, in case Drs. Mitchell and Jones should towards night feel convinced that death would occur, I should be summoned to perform transfusion.

At six that evening (Monday, four days after operation), I received a telegram urging my immediate attendance on Mrs. S., who appeared to be rapidly sinking. When I saw her I found her bathed in cold sweat, with a temperature of 101 degrees, a pulse of 150, and a facies expressive of approaching dissolution. It was decided at once to try the effect of transfusion.

Three experiments with the transfusion of blood rendered me very averse to the employment of this fluid, and with the consent of my colleagues I decided to employ instead perfectly pure, fresh milk. This idea suggested itself to my mind from the recollection of some cases in which it was employed twenty years ago by Dr. Edward M. Hodder, of Toronto, Canada. In 1850 Dr. Hodder injected this fluid into the veins of three patients moribund from Asiatic cholera, which was at that time epidemic in Canada. In a communication from him he informs me that he injected as much as fourteen ounces at one sitting; that no alarming symptoms occurred; that good results manifested themselves from the first; and that two recoveries had taken place in patients who appeared moribund when the operation was resorted to. He was encouraged to try the method from the fact that Donne had injected milk into the veins of dogs and rabbits without injury to them. Since the cases reported by Dr. Hodder, I know of no one who has repeated this experiment in the human being until a year ago, when Dr. Joseph W. Howe, of this city, injected six ounces of warm goat's milk into the cephalic vein of a patient suffering from tubercular disease, and who appeared to be dying from starvation in consequence of an inability to retain nutritious material by either stomach or rectum. Dr. Howe declares that—

"When nearly two ounces had been thrown into the circulation, he complained of pain in the head and vertigo. The eyes twitched from side to side (*nystagmus*), and he said he could not see. The same symptoms recurred when the next ounce was thrown in, and ceased when the injection was suspended. The third repetition of the same quantity produced pain in the chest and dyspnœa, and no brain symptoms. His pulse seemed to be fuller after the operation, and he said he felt better. Death took place four days afterwards. A post-mortem examination showed that there were no clots in the veins of the arm or in the lungs. The brain was normal. I don't think the operation improved his condition, notwithstanding the fact that the patient himself and the house surgeon thought it did."

Having decided to inject milk into the veins of my patient, a young and healthy cow was driven into the yard, a pitcher with gauze tied over its top was placed in a bucket of warm water, the vein was exposed and the cow milked at the moment the fluid was needed. By means of the very perfect and safe transfusion apparatus of M. Colin of Paris, I slowly injected eight and a half ounces into the median basilic vein. Te first effect which evinced itself did so after about three ounces had been injected. Then the pulse became so rapid and weak that Dr. Mitchell, who kept it under his finger during the operation, could scarcely detect it. The patient declared that she felt as if her head would burst, and seemed greatly overcome. I went on slowly, however, transfusing the fluid until the amount mentioned had been reached; she was then left perfectly quiet.

In an hour from this time she had a decided rigor, the pulse was found beating between 150 and 160 to the minute, and the temperature arose to 104 degrees. This high rate of temperature, however, soon passed off, and towards midnight the patient fell into a quiet sleep, from which she did not awake until morning.

I saw her about ten the next day, when Drs. Mitchell and Jones gave me a very encouraging account of her. As I entered her room she said in a feeble voice, "I feel that I am going to get well." This I was particularly glad to hear, as during the previous day she had given up all hope and was utterly despondent. The pulse was beating 116 to the minute, the temperature was $99\frac{1}{4}$ degrees, the tendency to sweating had disappeared, and the facies had much improved.

During the day very small amounts of iced milk and lime-water were given by the mouth and retained. From this time onwards it would be needless to mark the daily changes which occurred. The patient steadily progressed to complete recovery, and on the twenty-first day after the operation, upon a visit made by Dr. Jones, she walked down stairs to meet him. The notes taken by him on this occasion declare that "the appetite is excellent, the patient growing stout, sleeping well, and gaining every day." Six weeks have now elapsed since the operation, and the patient is entirely well.

The general appearance of the tumours is as follows: The larger resembles closely in aspect a cirrhosed liver. It measures in its longer circumference 19 inches; in its shorter 16 inches; and weighs 4½ pounds. The smaller tumour resembles a large fatty kidney; measures in its long circumference 12 inches; in its shorter 7½ inches; and weighs 1½ pounds.

Upon section a number of cysts were found in the larger tumour about the size of a chestnut, and filled with colloid material. In the smaller tumour no cysts appear except upon the circumference, where a few small ones, the largest about the size of a marble, exist.

Ulcerated Nipples.—M. Legroux advises the following treatment: Spread with a camel-hair brush a layer of elastic collodion around the nipple, in a radius of an inch or more; a piece of goldbeater's skin should then be placed over the nipple and collodion, taking care to make a few holes with a pin over the part of the goldbeater's skin which covers the nipple, so as to allow the milk to ooze through. No collodion should be spread on the nipple itself, as some pain might thereby be occasioned. By the rapid evaporation of the ether the collodion dries up, and the goldbeater's skin adheres. The nipple is then more or less pressed down by the latter, which in drying becomes tense. When the child is to be nursed, the end of the nipple should be wetted with a little water. The goldbeater's skin which covers it becomes soft and supple, allows the nipple to swell, and protects the ulcers and fissures from the strain of suction. The mother or wetnurse thus suffers no pain, and the ulcers heal in a few days.—*Annales de Gynécol.*

ARTIFICIAL DIET OF INFANTS.

Dr. B. F. Dawson says:—"If artificial diet be judiciously selected, there is no reason why a child should not thrive as well upon this kind of nutriment as when its support is derived from the mother's breast. No food is capable of properly supporting an infant unless it possesses heat and fat-producing properties. Any nourishment which does not come up to the requirements of a liquid food having the proper quality will produce intestinal troubles. What nourishment are we to give? Is there any one kind of nourishment which uniformly and perfectly supplies the place of breast-milk? The article which most perfectly answers all the requirements, and can be trusted to furnish all the elements of nutrition in the most digestible form, is milk from some animal. The milk of various animals varies to a certain extent in the properties of its different constituents; but that from the cow is the one which should ordinarily be used, and when properly prepared may answer all purposes. In its natural state it is not a fit article of food, and some article must be added which will effect a proper dilution. Water is the article commonly added; but by far the greater number of cases suffer in consequence of its addition. The addition of water alone does not improve the digestibility of the casein, for it does not dilute it; and when milk is introduced into the stomach, diluted with water, the water is soon taken up and the casein is left as undiluted and unchanged as before the food was given. Nor does the addition of sugar make the coagula any more easy of digestion; nor does skimming the milk act beneficially, but, on the contrary, deprives it of one of its most important constituents. Inasmuch as the mother's milk contains proportionately more fat than other milk, may it not be true that the finer coagula which is formed, when the mother's milk is introduced into the stomach, is due to the presence of this fat? and would it not be better to use the milk as an article of food, from which casein has been removed, rather than use the milk which has been deprived of its cream? It had been his experience that this was the more proper course to pursue. The admixture of farinaceous

articles with the milk also leads to disastrous consequences. There is one article, however, which contains such small quantities of starch that it can be used with very great success for effecting a proper dilution of cow's milk, and that is barley-water. Good cow's milk diluted from one-third to one-half with barley-water forms one of the best articles of food that can be used for infants when it is necessary to bring them up artificially. If barley cannot be obtained, oatmeal may be substituted, and answers nearly as good purpose. This article produces a real dilution of casein, and renders the coagula much finer and more like the coagula which is found in milk from the mother's breast.—*Obstetrical Journal.*

PREVENTION AND MANAGEMENT OF MISCARRIAGES.

Dr. A. W. Edis states (*Brit. Med. Journal*) that it has been his lot to observe numberless instances where miscarriage after miscarriage has been allowed to take place without a vaginal examination ever having been resorted to, or any attempt made to ascertain the causal condition of this premature expulsion of the ovum; no instructions having been given to the patient as to what precautions should be taken to avoid similar catastrophes, no injunction as to resting in the horizontal position, or living *absque marito* until the process of involution has had time to be accomplished; in fact, the whole affair being treated as if it were not worthy of serious consideration by the practitioner, or of any moment to the patient.

In a series of nearly 2000 cases of his own hospital patients at all ages, where the facts had been carefully recorded, there were no fewer than 1147 miscarriages compared with 4588 children born at full time—a proportion of exactly one in four. This ratio Dr. Edis finds to be as nearly as possible the same among his private patients, the increased development of the nervous system among the upper and middle classes compensating for the diminished risk from the accidents which affect the poorer classes.

In the large majority of cases of miscarriage, they will be found to be due to some deranged state of the mother's health, or to some morbid condition of the uterus or its appendages. There are also many what may be called accidental causes, such as blows, falls, sudden agitations from fright, &c., which disturb the equilibrium of the circulation or strongly affect the nervous system. These are self-evident, and will not be here further referred to, inasmuch as, beyond enjoining avoidance of all unnecessary risks when patients are in the early stage of pregnancy, we can scarcely regard these as preventable causes. Dr. Edis is anxious rather to direct attention to the unnecessary waste of life resulting from the frequent recurrence of miscarriage in the same patient where there is some deranged condition of the uterus or its appendages: causes that may be termed preventable.

The hope of preventing the recurrence of miscarriage depends upon our tracing out—what in every case exists—the efficient cause of it.

Management of Premature Children.—Dr. Ahfield, in the *Archiv. für Gynékologie*, Band viii., says that cases occurring in the practice of others and in his own have proved to him that premature infants ordinarily regarded as non-viable may, under favourable circumstances and assiduous care, live and thrive. He gives examples in which children born at the twenty-sixth week were preserved alive. Immediately after birth, the child must be wrapped in cotton and placed in a warm bath, so as to impart to it the heat which it is unable to produce in sufficient quantity. The baths, which should be somewhat warmer than usual, must be frequently repeated. Great importance is attached to awaking the child regularly every one or two hours in order to feed it. As long as it does not suck, milk (woman's is the best) must be given to it by a teaspoon. With a view to the better development of the lungs and the movement of the thoracic muscles, it should be excited to cry by slight irritation. It is dangerous to bring such children into the open air for several months after birth, as their air-passages are readily affected.—*Clinic*, Jan. 8, 1876.

THE COTTON PESSARY.

BY R. A. PAGE, M.D., WASHINGTON, D.C.

[Abbreviated from an original communication to the *New York Medical Journal*, January, 1876.]

At a time when uterine disease is becoming daily better understood, and more intelligently and successfully treated, the inability to obtain a form of uterine support which is of practical value is the source of a great deal of annoyance to those whose practice, like my own, is largely composed of cases of this class. Among the numerous inventions and improvements of pessaries to which the attention of the profession is constantly called, I have been unable to find one which could be used with comfort to the patient. My mind being constantly exercised upon the subject, I have at last hit upon one of form and material which, though extremely simple, seems, from the success I have had in the use of it, to unite all the qualities long sought in vain in these instruments . . . . It can be worn without discomfort, is elastic, retains its proper position while yielding to the motion of the body, is not an obstruction to the passages of the bladder or rectum, and being made of raw cotton, like the wads so much in favour at present, can, like them, be medicated to suit the requirements of various forms of uterine disease.

The form of the instrument is that of a tiny dumb-bell, *i.e.*, a shaft with a ball on each end. It is made in the following manner.—

For an instrument of the ordinary size required, take a piece of hard rubber rod, either hollow or solid, the thickness of a lead pencil, and about one inch and a-half long. This may be bent in any desired curve by running it through the flame of an alcohol-lamp and moulding with the fingers. The rod thus prepared is laid upon a piece of cotton batting, about ten inches long by eight wide; the long edge must be folded over about an inch and a-half on each side. The rod is then placed at the short edge of the cotton and firmly rolled the whole length of the piece, after which it is wrapped in the centre tightly with strong sewing silk for a space of about an inch and a-half, leaving a soft, compact, and elastic ball at each end. Over the wrapping I sew a piece of lint very smoothly, with the nap outside, and the pessary is complete.

In introducing the instrument with the Sims speculum, the uterine extremity is placed in the desired position, the other end is pushed up under the arch of the pubis, and held there while the speculum is removed. In this way it enables me to effectively apply local remedies, combining with them a gentle and unirritating pressure, which, in cases of capillary engorgement and enlargement of the cervix, is of great value. For the application of styptics in menorrhagia, or flooding, it is an excellent tampon.

This pessary can be retained two or three days, and after its removal can be cleaned if necessary. In cases of ante or retroversion, by placing one of the ends of the instrument, after it is anointed with glycerine carbolate, in the anterior or posterior *cul-de-sac*, the uterus is completely supported. In these cases it is best for the physician to apply the pessary himself, but one of its great advantages is, that in cases of prolapsus the patient can soon learn to apply it herself if she is properly instructed, thus saving much of the time and expense which a proper treatment of these cases generally involve.

ON THE ADVANTAGE OF MILK DIET IN ALBUMINURIA OF PREGNANT WOMEN, AND ITS INDICATION AS PREVENTIVE TREATMENT IN ECLAMPSIA.—Dr. Tarnier (in *Le Progrès Médical* No. 50, Dec. 11, 1875) recounts two instances where milk diet succeeded perfectly in relieving the œdema and albuminuria in two pregnant women, no other treatment being resorted to The first day one litre of milk and two portions of food were given; the second day two litres and one portion; the third three litres and half a portion; the fourth and following days, four litres or as much as desired without any other food.

In one to two weeks after the commencement of this treatment, the albuminuria notably decreased, and at length ceased entirely; the patients being delivered of healthy living children, and convalescing rapidly and perfectly. —*Obstetric Journal Summary.*

Materia Medica.

WARBURG'S TINCTURE.

This anti-pyretic remedy, which has attained much celebrity, and the composition of which was kept secret, has just been made public, in a paper by Prof. Maclean, of the Netley Medical School, published in the *Medical Times and Gazette*, of Nov. 13, 1875.

"It will be seen," says Prof. Maclean, "that quinine is the most important ingredient in the formula, each ounce bottle containing nine grains and a half of the alkaloid. Its presence has been detected by every chemist who has attempted its analysis, and never doubted by any medical man of experience who has used the tincture. Many will say 'after all, this vaunted remedy is only quinine concealed in a farrago of inert substances for purposes of mystification.' To this objection my answer is: I have treated remittent fevers of every degree of severity, contracted in the jungles of the Deccan and Mysore, at the base of mountain ranges in India, on the Coromandel coast, in the pestilential highlands of the Northern Division of the Madras Presidency, on the malarial rivers of China, and in men brought to Netley Hospital from the swamps of the Gold Coast, and I affirm that I have never seen quinine, when given alone, act in the manner characteristic of this tincture. And, although I yield to no one in my high opinion of the inestimable value of quinine, I have never seen a single dose of it given alone, to the extent of nine grains and a half, suffice to arrest an exacerbation of remittent fever, much less prevent its recurrence; while nothing is more common han to see the same quantity of the alkaloid in Warburg's tincture bring about both results."

The following is the formula for its preparation:—

℞ Aloes (Socotr.) libram; rad. rhei (East India); sem. angelicæ; * confect. fect. damocratis; ana uncias quatuor.

Rad. helenii (s. enulæ); croci sativi; sem. fœnicul.; † cret. præparat.; ana uncias duas.

Rad. gentianæ; rad. zedoariæ; pip. cubeb.; myrrh, elect.; camphor; ‡bolet. laricis; ana unciam.

The above ingredients are to be digested with 500 oz. proof spirits in a water-bath for twelve hours; then expressed, and added ten ounces of disulphate of quinine; the mixture to be replaced into the water-bath till all quinine be dissolved. The liquor, when cool, is to be filtered, and is then fit for use.

The mode of administering it is as follows:—

"One half ounce (half a bottle) is given alone, without dilution, after the bowels have been evacuated by any convenient purgative, all drink being withheld. In three hours the other half of the bottle is administered in the same way. Soon afterwards, particularly in hot climates, profuse, but seldom exhausting perspiration is produced. This has a strong aromatic odour, which I have often detected about the patient and his room on the following day. With this there is a rapid decline of temperature, immediate abatement of frontal headache—in a word, complete defervescence—and it seldom happens that a second bottle is required; if so, the dose must be repeated as above. In very adynamic cases, if the sweating threatens to prove exhausting, nourishment in the shape of beef-tea, with the addition of Liebig's extract, and some wine or brandy of good quality, may be required."

* This confection, which consists of an immense variety of aromatic substances, was once officinal, and is to be found in the London Pharmacopœia, 1746.

† Dr. Warburg informs me that this ingredient was added to correct the otherwise extremely acrid taste of the Tincture. Many other substances were tried, but none answered so well as prepared chalk.

‡ This is the Polyporus Laricis (P. officinalis, Boletus purgans or Larch Agaric), "formerly," says Pereira, "used as a drastic purgative, and still kept by the herbalist."

Treatment of Chronic Albumenuria.—In the *American Journal of Medical Sciences* for January, Dr. T. S. Sharpe of Natchez, Mississippi, reports five cases of Chronic Albumenuria successfully treated with large doses of Iodide of Potassium. The doses ranged from 10 to 36 grains three times a day. The ages of the patients were 22, 28, 58, 65 and 80 years respectively. In all the albumen disappeared, and *apparently* the health restored. In none of the cases did the iodide produce the peculiar unpleasant results attributed to large doses of the remedy, but it invariably increased the appetite and flow of urine. No patient admitted a syphilitic taint. Dr. John C. Inge has also treated similar cases with similar results.

THE CANADIAN

Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, MARCH, 1876.

Mr. R. Budenell Carter, in the *Lancet*, Aug. 7, 1875, contends "that ether is in all respects as available and as effectual as chloroform; secondly, that it is *absolutely safe*. I do not believe that it has ever destroyed life, nor do I believe it has any tendency to destroy it."

"I fully believe in the correctness of Dr. Joy Jeffries' assertion, that, as long as the patient receives air enough to prevent suffocation, you could not destroy life by ether if you tried."

Mal apropos of the above remarks comes the following report of death from ether.

Did the patient *receive air enough to prevent suffocation?*

DEATH FROM ETHER.—Dr. Finnel presented the larynx of a patient who recently died at the Homœopathic Hospital while being operated on for the removal of a necrosed portion of the superior maxilla. The only abnormality noticed in the specimen was œdema of the larynx. The history of the patient was, that he had suffered from necrosis of the maxilla, and it was determined to remove the sequestrum by operation. After having etherized the patient sufficiently, an incision was carried through the lip, and extended in a semicircular direction over the upper jaw. When the operation had proceeded thus far, the patient became cyanosed and died. It was suspected that blood had passed into the trachea, and to remedy this the patient was held up by his heels, but without effect. The time from commencing the administration of ether till death ensued was ten minutes. The amount of ether used was two and a quarter ounces. At the autopsy, no trace of blood could be discovered in the trachea. The heart was fatty, and weighed six ounces. No lesions could be discovered in any of the other viscera. A strong smell of ether was discoverable in the brain. The anæsthetic employed was the purified ether manufactured by Dr. Squibb.

ALL who knew him will read with deep regret the announcement of the death of Dr. McArthur, which occurred in Toronto, on Feb. 11th. Dr. McArthur was an old U. C. College boy, and matriculated in Arts, at Toronto University, in 1864. He attended one year in Arts and then began his medical course at Toronto School of Medicine, distinguishing himself in honours at the annual University Examinations. He graduated in 1869 and settled in Stoney Creek, where he soon obtained a large practice.

IN another column will be found an instructive communication from Dr. Joseph Workman, on the Mills murder case. We wish to call especial attention to it, as all may read it with pleasure and profit.

WE are greatly obliged to Dr. Anson S. Fraser, of Sarnia, for a copy of the Minutes of the Western and St. Clair Medical Association, held at Chatham, on Feb. 4th. We regret that they arrived too late for insertion this month. They will appear in the April number.

PRESENTATION TO DR. O'RIELLY.—On Tuesday evening, Feb. 8th, Dr. O'Rielly was entertained by the Mayor and Aldermen of Hamilton at a dinner, and presented with an address and a valuable and handsome solid silver-plate service, on the occasion of his leaving the Hamilton Hospital to assume the position of Medical Superintendent to the Toronto General Hospital. Dr. O'Reilly's associates of the Hamilton Medical Surgical Society presented him with a handsome clock.

Communications.

To the Editor of the Canadian Journal of Medical Science.

LETTER FROM DR. WORKMAN ON THE McCONNELL CASE.

SIR: I fear that in begging for insertion in your columns of the following observations on the deplorable and atrocious homicide, which has so recently shocked, not only the citizens of Hamilton, but our entire community, I may be trespassing alike on your polite forbearance and your valuable space. Never, perhaps, in this Dominion, granting that the culprit was a perfectly sane and responsible member of society, was a more deliberate and ferocious murder committed, than that of the lamented *James Nelson Mills*, by the hands of *Michael McConnell*. Universal abhorrence of the crime, and an intense popular desire for retaliative punishment of the perpetrator, were the natural and usual outbursts in every bosom in which the sacredness of human life, and detestation of inhuman butchery, find lodgment. But in the presence of an overbearing popular commotion, or, as I feel almost tempted in the present instance, *from my standpoint*, to designate it, an epidemic frenzy, what assurance can we have that the crime of Michael McConnell has been weighed in the balance of dispassionate, sound, and adequately cultivated judgment? In the very outset I affirm, unhesitatingly and deliberately, that neither the richly talented Judge (of whose legal acquirements and personal worth I have a very high opinion), nor the prosecuting and defending counsel, nor the twelve apparently respectable jurors before whom McConnell stood on trial, possessed that knowledge of mental disease which is essential to the formation of a just and safe conclusion, in any case in which the question of the prisoner's sanity or insanity of mind becomes the supreme difficulty. The truth is, the literature of insanity is, to the entire community, outside the list of alienistic specialists, and a portion of the profession of medicine, a sealed book. Judges and barristers have neither the time nor inclination to prosecute the study. Their knowledge of mental disease is derived from old musty volumes, exhibiting in due succession the conflicting deliverances of men who, devoid of all *practical* knowledge of insanity, have arrogated to themselves the prerogative of oracular intuition, and have bequeathed to their successors an incongruous mass of legal precedents and rulings, which have perplexed the most painstaking and intelligent students.

The great Lord Brougham said, in relation to the celebrated case of Bellingham, who assassinated Mr. Percival, "he could conceive a person whom Deity might not deem accountable, but who might be perfectly accountable to human laws." Was there a man on McConnell's jury who would have assented to the verdict of *guilty*, could he only have conceived, or believed, that *God* did not hold him accountable for the killing of Mr. Mills?

But Lord Brougham was not content with the above monstrous, if not semi-blasphemous, utterance. He states that had the trial of Bellingham, instead of being precipitated, been postponed, to allow time for hearing evidence, clear proof of the man's insanity, and the existence of insanity in his family would have been given; but he adds with ineffable coolness, "no man doubted the result of the trial would have been precisely the same, had the evidence been adduced." In other words, though the jury might have believed the prisoner to have been insane when he killed Mr. Percival, and that "Deity might not hold him accountable," yet, under the ruling of a British Draco, he should be promptly sent to the gallows.

The divine Shakespeare tells us, in the person of his honoured judge, Portia, that

> "Earthly power doth then show likest God's,
> When mercy seasons justice."

Lord Brougham's reasoning was not of this order. According to his Lordship's conception of human justice, not only should it never be tainted with mercy, but it should even be divested of all regard to facts. Bellingham killed Percival in the presence of many witnesses. Popular abhorrence was aroused. The culprit could not, did not deny the fact. When asked why he did it, he replied, "Oh, do it, that was perfectly inevitable; there was no wrong at all in it; I could not help it."

Could Michael McConnell help killing James Nelson Mills? That is the question of questions? Every peaceable, orderly Christian man, speaking from the promptings of his own self-consciousness, and in cognizance of the facts adduced by the prosecution, will, no doubt, say that he *might* have helped it if he *would*. But every man is, fortunately, not Michael McConnell, and before pronouncing rashly on the criminal's power of *willing*, every man should endeavour to comprehend exactly the condition of his mind at the time of committing the crime. A recent very celebrated writer, Dr. Mandesley, in a valuable treatise, entitled, "Responsibility in Mental Disease," when treating of "Erroneous popular and legal notions," uses the following language:—

"Were the observer, whether casual or skilled, to reside for some length of time in an asylum, and thus to make himself practically acquainted with the ways, thoughts, and feelings of its inmates, he would certainly discover how great a mistake it is to suppose, as is often done, that they are always so alienated from themselves and from their kind, as not to be influenced by the same motives as sane persons in what they do or forbear to do. When an insane person is on his trial for some criminal offence, it is commonly taken for granted by the lawyers that if an ordinary motive for the act, such as anger, revenge, jealousy, or any other passion, can be discovered, there is no ground to allege insanity, or, at any rate, no ground to allege exemption from responsibility by reason of insanity.

The ideal madman whom the law creates is supposed to act without motive, or from such motives as it enters not into the head of a sane person to conceive; and if some one who is plainly mad to all the world, acts from an ordinary motive in the perpetration of an offence, he is presumed to have acted sanely and with full capacity of responsibility. No greater mistake could well be made.

Such is the opinion of a man of very extended experience, and of superior capacity of observation.

In a subsequent part of his book Dr. Mandesley says: "There are few persons engaged in the study and treatment of insanity who have not like Esquirol, begun by doubting the existence of real impulsive insanity; there are none who, after having had a large enough experience, have not, like him, been compelled to abandon their doubts. To those who judge by the experience of a sane self-consciousness, and so *prejudge the facts*, it seems an inconceivable state of mind, or at any rate, it seems inconceivable that a person in such a state of mind should not have the power to control the insane impulse; to those who form their conclusion from observation and experience of the facts of the disease, and so interpret them fairly, no doubt of its existence is finally possible."

Dr. Mandesley next proceeds to detail some cases confirmative of his views.

A most instructive and able paper, on transitory mania, from the pen of Dr. Edward Jarvis, a gentleman who has devoted a long lifetime to the study and treatment of insanity, was published in the *American Journal of Insanity* for July, 1869. It happened that very shortly after my receipt of that number, I was called as an expert witness to a Country Assizes, in the case of the murder of a woman by her husband. I travelled in the same railway carriage with the legal gentleman who was engaged for the defence. I put the journal into his hands. He was struck with admiration of the force and clearness of Dr. Jarvis's production, and in his address to the jury, he ventured to read a passage which bore directly on the case then in hand. He was instantly stopped by the judge, who expressed his astonishment that so eminent a lawyer should attempt to quote to a jury from so worthless a publication. He might have quoted by the bushel the venerated and ever varying deliverances of the oracles of British jurisprudence, propounded from beneath the colossal wigs; but to appeal to the matured knowledge of a man whose reputation as an experienced and deep-thinking alienist is of well-merited fame, wherever insanity and its human treatment have become subjects of national interest and Christian consideration, was an offence unendurable in a court of British justice; consequently the advocate was doomed to dumbness.

In my evidence, I ventured the expression of opinion, that the enormity of the crime, and its unnatural character, appeared to me suggestive of mental alienation in its perpetrator. For this frank ebulition of latent conviction, I was, as a matter of course, duly, though very tenderly, censured by his Lordship. The jury, however, declared the prisoner insane. He was afterwards committed, under proper legal warrant, to my charge. For more than a year after his entrance into the asylum, he was regarded as not insane by all my assistants, and I was myself often tempted to think that I had done a wrong act in saving him from the gallows—so troublesome and vexatious was his conduct. Time justified me—long before I retired from the asylum, all question of the man's mental unsoundness had vanished. Since the occurrence of his insanity and crime, a nephew has been known to me as a nefarious idiot, and two brothers as lunatics and drunkards. One of the latter died in the gaol at Guelph quite recently, in the night, after an apparently epileptic seizure.

Dr. Jarvis, in the paper mentioned, reproduces from the writings of numerous eminent alienists, details of flagrant acts of homicide committed by insane persons, in whose trials the question of their true mental condition was very keenly contested. It is utterly impossible to read these cases without indentifying in the details, several most important coincidences between the facts given and those which were established in the evidence furnished in McConnell's trial. It would, however, be too large an encroachment on the columns of a journal, to introduce them in this communication, I must, therefore, be content with a compressed statement of the general conclusions arrived at by Dr. Jarvis and the distinguished authorities quoted by him.

Dr. Ray, whose treatise on "the Medical Jurisprudence of Insanity," has commanded the high respect and approval of every experienced alienist in America and Europe, says: "Insane impulses often come on very suddenly, and appear to be uncontrollable." Again, "Cries are sometimes observed in insanity, where the force of the disorder seems to expand itself in a single moment, or upon some particular occasion."

"The calmness of the defendant after the homicidal act is in accordance with general experience."

Dr. Bell, (the late) an alienist of the very highest reputation and worth, in relation to the same case, said; "It is a well settled fact, that after proxysms of violence, the insane often appear calm and tranquil."

Dr. Woodward, another alienist of well established repute, said: "The calmness of the defendant after the act coincides with common experience."

Esquirol, whose treatise on insanity has immor-

talized his name, and shed an enduring lustre on the medical literature of France, has written thus :

"Some monomaniac homicides, after the act, appear to be relieved of all agitation and distress. They are calm, without regret. They contemplate their victims with coolness, and sometimes with a sort of satisfaction." I might go on in citations from the highest authorities sufficient to fill columns of your journal, but no reflecting or unprejudiced reader will be so exacting as to demand the trespass on your space, or the unnecessary infliction on your correspondent. If, however, I may, without exposure to the impeachment of egotism, adduce my own, almost *grave* experience in relation to homicidal purpose and violent perpetration of injury, I can state that twice during my asylum residence I was providentially saved from a fate similar to that of Mr. Mills, and from exactly the same sort of weapon. If, in your court-house I could have managed, on sight of the McConnel knife, to summon up so theatric a shiver as one of the female witnesses displayed, I might excusably have done so ; but it did not occur to me thus to justify Government for the bestowal on me of a dangerous retiring allowance. Twice more I escaped from serious, though not murderous attacks, but with bodily injuries which must painfully hang on, to the grave.

Did my intending assassins, or my actual assailants, ever express or feel regret for their premeditated or achieved inflictions? Not the slightest ; nor did I ever feel the slightest inclination or desire to retaliate, for I regarded their thoughts and deeds as the promptings of insanity—at least I so did in the cases of three. The fourth, however, having already been a murderess—a convict from the Penitentiary,—I never believed to be insane ; and I had, before her concealment of the knife, taken steps for her remand back to penal imprisonment. As to the other three, I took good care to have them well watched, and I watched them myself very circumspectly.

Now, I ask, with all seriousness, and with the most respectful consideration of outraged popular sentiment, did not the clearly established fact of McConnell's cool and brutal indifference after his butchery of Mr. Mills, most potently sway the minds, not only of the outside multitude, but of all within the court, not excluding the jury, nor even the judge on the bench? And yet that very "cool and brutal indifference," would, alone, had his jury consisted of such enlightened and experienced men as Esquirol, Ray, Bell, Woodward, Jarvis—men who have studied mental disease in the *living* book, walking daily and life-long among its unfortunate subjects—have hardly failed to determine their decision, and that decision would have been very different from the verdict rendered by McConnell's jury, and applauded by the judge. But it would be, if not wrong, perhaps very dangerous to society, and in my opinion very unjust to the convict, to rest the assumption of his mental disease on the preceding consideration solely. It is quite unnecessary to do so.

Two corroborative facts which I regard, and every medical alienist, as well as every thoroughly educated medical practitioner, unquestionably regard, as of overwhelming value in support of the theory of the culprit's insanity, were established in evidence.

First, The infliction of a fracture of his skull two or three years before the murder.

Secondly, The existence of insanity, (or perhaps idiocy), in a blood relative—a cousin.

The prosecuting counsel, as no doubt he complacently felt in duty bound, affected to regard the first fact as utterly insignificant in the decision of McConnell's mental state. My evidence as I now read it in the newspapers, appears to me to have been imperfectly, and in some parts incorrectly reported ; but the prosecution asked me so many strange random questions, that it was almost impossible to frame rational or pertinent answers. For example, he demanded from me a *definition* of insanity, ignorant, doubtless, of the fact, that all the authors most competent to define the malady, have declared themselves unable to give one that will embrace the whole subject. Experienced alienists, and eminent writers on insanity have carefully avoided this perilous dogmatism. No mortal ever scanned the depths and shoals, the dark caves and deep labyrinths of the human mind so thoroughly as Shakspeare, nor has any writer ever depicted the workings of the disordered brain so truthfully ; and never spoke philosopher more wisely than he makes the babbling Polonius to do, when he tells the Queen that

> "to define true madness,
> What is't but to be nothing else but mad."

Definitions of insanity have indeed been vouchsafed by oracles of the long robe, whose knowledge of the disease has been learned, as at one time was that of anatomy by army surgeons, on the field of battle. Much blood has been fatally shed by both these orders of explorers.

The learned counsel also insisted on my furnishing a definition of a *lucid interval*, and looked daggers at me when I declined. He knew not that a *lucid interval*, as defined by his own highest authorities, is a perfect theoretic fiction, and is treated with contempt or ridicule by every able writer or insanity. And what in the name of the eighth wonder of the world had a *lucid interval* to do with McConnell's case? Was not the very entertainment of the notion a manifest abandonment of the theory of the prisoner's sanity? To return, however, to the subject of the skull fracture. This injury was clearly established by the evidence of Dr. Reid. I detected it on my very first glance at the prisoner's head, and every juror might, from the box, have perceived the prominent ridge above the left eyebrow, which now proclaims the seat of injury. Dr. Reid swore the skull was both fractured and depressed. Will any experienced surgeon allege that so serious a lesion would be unlikely to result, some time, near or remote, in formidable cerebral disturbance, or calamitous mental overthrow? If any such is to be found, I would strongly advise him to go back to the classrooms ; for he must either have much to learn, or to unlearn. Almost every writer on insanity dwells with strong emphasis on the causal relation of all sorts of injuries to the head, to insanity ; I have introduced the observations of only a few.

Dr. Rush, of Philadelphia, one of the brightest ornaments of medicine, writing 60 years ago, "On

the Diseases of the Mind," treats of leisons of the brain in the following terms : "Between lesions of the brain and the existence of madness, there is sometimes an interval of several years. A young man died in the Pennsylvania Hospital in the year 1809, who became deranged at twenty-one, in consequence of a contusion on his head by a fall from his horse in the fifteenth year of his age. A Mr. —— died of madness in the same place, from an injury done to his brain by being thrown out of his chair between two and three years before he discovered any signs of derangement. It is remarkable that injuries show themselves more slowly in the brain than in any other parts of the body. Dr. Lettsom, of London, mentions a case in the memoirs of the London Medical Society, of a disease in the brain caused by a fall from a horse, which did not discover itself until two and twenty years after the occurrence. So much for Dr. Rush.

I now proceed to quote from letter writers. Dr. Prichard, the author of a very valuable treatise on insanity, writing in 1837, makes the following observations on " Injuries of the Head :"

" Injuries of the head are much more frequently causes of delirium than of insanity ; but instances are well known in which they include the latter affection, generally as a remote consequence of delirium."

Several cases of this description have occurred within my own knowledge. In some instances madness has been observed to supervene to injuries of the head which appeared to be slight, and occasioned at first little or no apprehension. Mr. Esquirol is of opinion that insanity occasioned by this cause ensues sometimes after an interval of several years. This writer mentions the case of a child who fell on its head when three years old ; *he complained from that time of pains in his head;* about the time of puberty these pains increased, and at seventy years of age he became maniacal.

There are instances in which a slight peculiarity of character, not amounting to insanity, has remained long, and perhaps through the life of the individual who has sustained a severe injury of the head. Sometimes this constitutes a kind of moral insanity; the temper is more irritable, the feelings are less under restraint than previously."

I have italicised the above words because they appear to me to bear directly on the case of McConnell, and because they exactly accord with my observance. During my service in the Asylum, I had in charge many cases of insanity consequent on injuries of the head, and I was consulted in many outside cases of similar character. One remarkable case in the asylum was that of a man whose skull was cleft with an axe ten years before his admission. This man's insanity crept on gradually. In the end it assumed a character of intense ferocity, on any unfortunate occasion of irritation, or crossing. After several years' asylum residence he died, not from brain disease, but tuberculous consumption. The *post mortem* showed that a bit of the axe had been buried in the brain down to the floor of one of the internal ventricles. We lived in constant dread of his furious outbursts. He would not suffer any one to touch his head, over the seat of the injury.

Forbes Winslow, whose celebrity as an acute expert is well known, alluding to injuries of the head in connection with insanity, speaks thus : " Do we estimate in a manner commensurate with its grave and vital importance the necessity of watching, with the most scrupulous care, the cerebral symptoms that follow all mechanical injuries to the head ? I am satisfied that a vast amount of organic, chronic, incurable disease of the brain, and disorder of the mind can be directly traced to this cause.

" In many cases positive and undoubted evidences of disease of the brain *are present without exciting a suspicion* as to the cerebral origin of the affection, or character of the symptoms. A man receives a blow on the head. He may suffer from partial concussion of the brain or be merely stunned. He recovers without any *apparent* inconveniences from the injury, but subsequently head symptoms exhibit themselves, clearly the consequence of the injury which the brain has sustained many years previously."

Dr. Blanford, a recent high authority, says : " It frequently happens that men who have received blows on the head are driven to a state of frenzy or mania, by slight causes, which would produce little or no effect on an uninjured and healthy brain, such as a very small amount of drink, or trivial matters exciting anger or grief. *From such transient attacks patients recover and return to their normal state of equipoise, to be thrown off their balance again by some other disturbing event.*"

Professor Schlagev, of Vienna, found on investigation of the causes of insanity in 500 lunatics, that " the disease was produced in 49 by injury of the brain. In 21 there had been complete consciousness after the accidents ; in 16 some insensibility, and confusion of ideas ; in 12 simple dull headache. In 19 cases the mental disorder came on in the course of a year after the injury, but not till much later in many others, and in 4 cases after more than ten years. In most of the cases the patients were disposed to congestion of the brain and emotional disturbance from the time of the injury, on taking a moderate quantity of spirituous liquor ; frequently there was singing in the ears, or difficulty of hearing ; and very commonly the disposition was changed, and the patient was prone to outbursts of anger, or excesses."

I might go on in quotations from additional authorities in support of the testimony given by me on McConnell's trial, but surely the labor is uncalled for. Those who will not be convinced by the selections here given, could not be reached by a pyramid of corroborations. The reporter for the *Globe* has represented me as saying, " the actions of the prisoner on the morning of the crime appear to me to be those of a person who was not in sound mind,"—so far quite correctly ; but when he adds " I do not swear that," he surely was in error. I had just *sworn that* because I *believed that*. How then, or why, should I, in next breath, unswear it ? Either he was in a cloud, or I was. I am quite unconscious of having so spoken.

And now after careful retrospection and calm deliberation, I reiterate my expression of belief, that Michael McConnell, on the morning of the murder of Mr. Mills, was in a state of unsound

mind, and I add to this, that for a considerable time before he was not truly sane.

Let us soberly analyse his whole case. Hereditary insane taint was, I think, established. The history of 125 cases of homicide committed by insane persons placed in the New York State Lunatic Asylum, from 1843 to 1875, shows a very considerable proportion of the number to have been of hereditary derivation.

The blow which fractured the skull must have been of great force. It was struck, there is sufficient reason to believe, by a burglar, or some person who intended to take McConnell's life. It is much to be regretted that Dr. Reid's evidence on the gravity of the case, the subsequent symptoms and his treatment, was not more extended. Dr. Reid swore that there was depression of bone with the fracture. The former must have been relieved or the patient would soon have died, unless the wound was open, and thus allowed free escape of blood, or other effused fluids. If the latter was the fact, the brain and its covering membranes must have been dangerously injured. But, whatever may have been the original facts, I think no one who reads the citations I have given from the writings of experienced and able alienists, can doubt that very serious mental derangement might at some future time be presented.

McConnell's addiction to the study of Phrenology might pass as undeserving of consideration, had it been evinced by any other man carrying an uninjured brain ; yet, may we not fairly ask the question, whether such a study, or any other of a scientific character, is so usual among butchers as not to be regarded as a significant psychological manifestation ? Whilst his trade associates were chaffing and sky-larking around their neighboring stalls, there sat, behind his counter, the man with the fractured skull, poring over phrenological journals and charts, and exulting in the discovery that his own head was the most perfect one ever formed. I might be persuaded that this divergence from the beaten track of butcher life, was but a normal eccentricity or a constitutional idiosyncrasy, would my questioner be so accommodating as to wipe out the skull fracture history, and obliterate that bone ridge in McConnell's forehead.

I have already, in my own social circle, and largely outside of it, had abundant proof, that to adduce, as even *suggestive* indication of McConnell's mental unsoundness, the shudder-compelling ferocity and sanguinary persistency, with which he assailed and followed up his helpless victim, is but to evoke an almost universal outburst of denunciation ; but all such exhibitions of writhing human passion must be encountered with cultivated equanimity, and unswerving fortitude. Why should it be expected that homicide perpetrated by an insane man or woman, should not be characterized by unusual ferocity ? They who allow this manifestation to overpower calm or considerate judgment, are but meagrely read in the histories of insane homicides. Dr. Ray, the eminent *alienistic* jurist whom I have already cited, contrastively, in this relation, thus expresses himself :

" The *criminal* never sheds more blood than is necessary for the attainment of his object ; the *homicidal monomaniac* often sacrifices all within his reach to the craving of his murderous propensity."

" The criminal lays plans for the execution of his designs ; time, place, and weapons are all suited to his purpose ; and when successful, he either flies from the scene of his enormity, or makes efforts to avoid discovery. The homicidal monomaniac, on the contrary, for the most part, consults none of the usual conveniences of crime ; he falls upon the object of his fury, oftentimes without the most proper means for accomplishing his purpose ; and perhaps *in the presence of a multitude*, as if expressly to court observation ; and then voluntarily surrenders himself to the constituted authorities. When, as is sometimes the case, he does prepare the means, and calmly and deliberately executes his project, his subsequent conduct is still the same as in the former instance."

The preceding words are not the deliverances of a man who knew not whereof he spoke: they are the deliberate declarations of one of the most enlightened and largely experienced writers that has ever enriched the literature of insanity.

Did McConnell select the best time, place and weapon, for the consummation of his crime ? He assailed Mr. Mills in broad daylight, before the eyes of numerous onlookers. He inflicted numerous stabs with a knife, whilst he had, at the very time, a seven-chambered revolver, fully loaded, in his pocket. He had carried that revolver constantly, ever since the murderous attack on himself, when his skull was broken. Would not a deliberate sane murderer have chosen the darkness of night, some secluded spot, and his sure-killing revolver ? It can not be necessary to say here a word on McConnell's coolness and indifference after the homicide. These I regard, as I am sure every asylum physician, and every well-read cultivator of alienistic science would regard them convincingly corroborative of all the other evidences of insanity exhibited in the case.

Before closing this already too long communication, allow me to recall the attention of your readers to the case of Topping, who was last year convicted of the murder of his wife and four children. If I remember aright, nearly the whole of the evidence bearing on his mental condition, with the exception of that of Dr. Landor, Medical Superintendent of the London Asylum, negatived the presence of insanity, at any time. I have this morning received a letter from Dr. Dickson, Medical Superintendent of the Rockwood Asylum, in which Topping is now lodged, in which he says, " I believe Topping to be insane without any manner of doubt." I know not whether the Judge before whom Topping was tried, expressed his approval of the verdict of the jury ; but, I believe that only for the presence of Dr. Landor at the trial, the convicted wretch would have been hanged. I could adduce a few other instances, illustrative of the absence of infallibility, both on the bench and in the jury box, but I do not deem the present a propitious occasion for such observations. It has often been urged on me that for the benefit of medical students, a course of clinical instruction in our large insane asylums should be afforded. I concur in this opinion ; but I am proud to be able to say, that however trivial may be the knowledge

of insanity possessed by the practitioners of medicine, I never knew, during my 22 years of service, a single instance of wrongful commitment of a patient, under the usual certificates of insanity, by duly qualified physicians.

It is not, believe me, the medical profession that pre-eminently stands in need of rational instruction on insanity. Many a victim of petrified legal ignorance might have been rescued from the gallows, had the gentlemen of the bar undergone a befitting practical training in the science of mental disease. I am, very respectfully, etc.,

JOSEPH WORKMAN, M.D.,

Late Medical Superintendent of the Toronto Asylum for Insane.

Toronto, Feb. 10, 1876.

P.S.—Within the past three days I have been consulted in two cases of mental disease consequent on injuries to the head, sustained in one case, that of a man 35 years old, very many years ago; and in the second four or five years ago, from the blow of a slung-shot on the forehead. My prognosis in both is most unpromising.

I have just cut from the Toronto *Globe* of the 5th inst., the following scrap:

"Gen. Thomas Benton Smith, of Nashville, who displayed great courage in the Confederate army, and received a sabre stroke on the head, has become hopelessly insane. A few days ago he grew thoroughly wild, and imagining himself to be the Indian emperor of America, mounted his horse, armed himself with bow and arrows, and rode around attacking every one he met. He sent a steel arrow-head into the leg of his cousin, and when pursued fled to the hills and was captured only with great difficulty."—J. W.

To the Editor of the CANADIAN JOURNAL OF MEDICAL SCIENCE.

LACK OF PROFESSIONAL *ESPRIT-DE-CORPS.*

SIR.—It is a matter of surprise and regret to me to see Medical men writing to the *Globe* on Medical subjects. The action of the *Globe* towards the profession has been such that I and many others have written to the Manager withdrawing our names from its list of subscribers and stating our reasons. *A fortiori* I fail to understand how men can quietly pocket the insulting epithets and remarks lately made by the *Globe* and signify their friendly appreciation and support by discussing medical matters in its columns.

I am yours, &c.,

W. O.

Hospital Reports.

A CURIOUS CASE OF VESICAL CALCULUS.

Reported by Mr. Jessop.

Thomas D——, aged thirty-eight, was admitted to the Toronto General Hospital, under the care of Dr. Aikins, December 2nd, 1875, complaining of severe pain in the neck of the bladder, and in the perineal region. The pain was aggravated by riding over a rough road, or by doing anything which jarred the pelvis viscera. The pain was especially acute in the *glans penis* after urination. The patient gives the following account of the origin of his trouble.—

About the commencement of last March he was once in a state of deep intoxication, remaining in an almost unconscious condition for some hours. After recovering from the effects of the liquor, he felt a severe pain in the bladder and urethra, especially after passing water. About a week after, a friend, hearing him complain of pain, said he heard two men talking about passing the stem of a tobacco pipe into his (the patient's) penis when he was sleeping under the influence of liquor. Since April the pain has continually increased in severity, so much so that he could scarcely sit or lie down. He had frequent desire to micturate, passed mucus streaked with blood, also a large quantity of white sediment. He was under treatment during the summer but did not receive much benefit.

After admission into the Hospital a sound was introduced into the bladder, and a calculus discovered. Several attempts were made to crush the calculus by means of the lithotrite, but without success. It was then decided to perform the operation of lithotomy, which was successfully done by Dr. Aikins, January 22nd, 1876, when an oval-shaped calculus was removed, consisting of concentric layers of uric acid formed around a gutta-percha pipe stem, which latter acted as a nucleus for the deposition of urinary sediment. It was about three inches long, and over an inch in diameter in the thickest part, tapering towards its extremities.

After the operation, the patient made a rapid recovery, being able to pass his urine through the urethra in eight days. No bad symptoms followed, and at present (February 12) the patient is ready to be discharged, cured.

OBSCURE ABDOMINAL TUMOUR.

Reported by Mr. McDonnagh.

Francis K——, aged 27, born in Canada, was admitted into the Hospital February 10th, 1876, under the care of Dr. Cassidy. In May, 1874, the patient had his left hand injured by a circular saw, whereby he lost all his fingers and a part of the metacarpal bone of the little finger. After amputation the wounds never healed properly, and have not done so up to the present time. In February, 1875, previous to which time his general health had been good, he observed a slightly indurated swelling in the lower part of the abdomen, attended with some pain. After this period his general health became poor and he lost weight rapidly. The pain, which extended over the whole abdomen, was increased after taking food. However, in three or four months after the first symptoms appeared, that is in June, the pain went away and the general heath improved. In August all the old symptoms returned with increased severity, and have so continued to the present. In the middle of September a small inflamed nodule appeared near the umbilicus, which broke, and pus in large quantities has since come away from it.

At present the swelling extends from the umbilicus downwards to Poupart's ligament on either side, but feels hard towards the right side. A probe can be passed in some directions five or six inches, between the walls of the abdomen. The patient experiences severe pain on taking food, but the tumour is not tender on pressure. He is considerably reduced, but does not show any particular cachexia He has had diarrhœa constantly since the commencement of the disease.

On February 12th a consultation of the staff was held with regard to the case, when the diagnosis was made of abcess in the walls of the abdomen, but the question as to whether the induration is due to malignant disease or to simple inflammation was not determined.

MEETINGS OF MEDICAL SOCIETIES AND ASSOCIATIONS.

Saugeen and Brock Medical Association.—At a numerously attended meeting of medical men of the territorial division of Saugeen and Brock, held at the Queen's Hotel, Guelph, on the 27th inst., Dr. Clarke, the medical representative, in the chair, it was resolved that a medical association for this territorial division be formed; the representative, Dr. Clarke, being President; and Dr. L. Brock, General Secretary and Treasurer. After the transaction of other business it was moved by Dr. Orton, of Fergus, seconded by Dr. Cameron, of Owen Sound, that the tariff which has been under consideration be the tariff of fees for the Territorial Division of Saugeen and Brock, and that the following gentlemen are requested to obtain the signatures of all the medical men in this division: Drs. Orton and Wallace, for the Centre and North Ridings of Wellington; Dr. Brock, for the South; Dr. Cameron, for the county of Grey; Drs. Bingham and Walmsley, for Waterloo; and Drs. Morton and McConkey, for Simcoe; the Secretary to obtain the necessary copies for that purpose. Moved by Dr. Orton, seconded by Dr. Wallace, that Drs. Herod, Keating and McCullough, with the President and Secretary, be a committee to whom all questions relating to the necessary working of the Association be referred. It was also resolved that in all life insurance examinations in which the amount exceeds one thousand dollars the fee for Canadian Companies should be $4, foreign $5.

The Annual Meeting of the Hamilton Medical and Surgical Society.—The annual meeting of the above Society was held last evening at the Royal Hotel; Dr. Isaac Ryall, the President of the Society, presided.

The Secretary of the Society, Dr. C. O'Reilly, being about to remove from this city to Toronto, after presenting his annual report for the year 1875, tendered his resignation of the office of Secretary-Treasurer, which he had held since the year 1870.

It was then moved by Dr. Case, seconded by Dr. Rosebrugh, and resolved, That the report of the Secretary-Treasurer be adopted, and that

the cordial thanks of the Society are due to Dr. O'Reilly for his long and valuable services, and that the Society joins heartily in wishing the Doctor every success in his new sphere of labour.

The election of officers for the year 1876 was then held, and resulted as follows: Dr. Macdonald, President; Dr. Leslie, Vice-President; and Dr. Woolverton, Secretary-Treasurer.

Moved by Dr. Mullen, seconded by Dr. White, and carried unanimously, That the thanks of the Society be tendered to the retiring officers (Dr. Ryall, President; and Dr. George Macklean, Vice-President) for their services during the past year.

The meeting then adjourned.—*Hamilton Times.*

Halifax County Medical Society.—The following scale of fees has been adopted by the Halifax County Medical Society :—

Ordinary Fees.—Fee for ordinary visit, from $1 to $5. Night visit—from 10 p.m. to 7 a.m., —four times an ordinary visit.

Consultation. — Fee for consultation — first visit from $5 to $20; subsequent consultation to be charged as ordinary visits.

Office Consultations.—Office consultations to be charged the same as visits. Special consultation for an opinion, from $2 to $10.

Midwifery.—Minimum fee $10 (payable when attendance ceases); maximum $50. Instrumental and very tedious cases, additional.

Surgery. — Operations from $5 to $300. Venereal affections, from $5 to $20 for first office consultation. Subsequent consultations not less than $1.

Miscellaneous.— Travelling, $1 per mile—detention over night, not less than $20. Vaccination, not less than $1. Advice by letter, not less than $5. Post-mortem examination—by request—from $5 to $20. Student's fee—in advance—not less than $200. Evidence before a coroner's jury—by law. Post-mortem examination by order of coroner—by law.

Certificates.—By order of corporation, $5; of lunacy, $5; for life assurance, not less than $2 50; for exemption from juries, $2; for exemption from militia duty—by law.

Signed on behalf of the Society,

Edw. Farrell, Pres. Hx. Med. Society.
George L. Sinclair, M.D., Secretary.

Miscellaneous.

College of Physicians and Surgeons of Ontario.—To the Hon. Oliver Mowat, Attorney-General, Prime Minister of Ontario :

Sir: At a meeting held this day of the Sub-Committee of the Executive Committee of the College of Physicians and Surgeons of Ontario, I received instructions to express to you the deep disappointment felt by the Committee and probably by the whole Medical Profession in Ontario, that in the Bill which you have brought before the Legislature, entitled "An Act to Provide for the Payment of Witnesses for the Crown," more adequate provision is not made for the remuneration of Medical Witnesses for the important services which they perform for the public in criminal cases. Section 2 of the Bill provides, that the remuneration of any witnesses shall not exceed that payable to the like witnesses in civil cases before the Superior Courts. Upon referring to the "Common Law Procedure Act, Consol. Statues U. C., cap xxii.," it appears that "Barristers and Attorneys, Physicians and "Surgeons, when called upon to give evidence "in consequence of any professional service ren-"dered, or to give professional opinions, are "allowed £1. 0s. 0d. per diem, and in the case "of their being required to travel over ten "miles, one shilling per mile, one way." I was directed to point out to you that in civil cases the remuneration of both Legal and Medical witnesses is generally a matter of special agreement, and even when it is not, the fees allowed are always very much higher than the rate mentioned in the Act quoted. The Committee hoped, therefore, that you would be kind enough so to modify your Bill as to admit the following as one of its sections :—

"Every duly qualified Medical Practitioner in Ontario, if summoned to give professional evidence at any inquest, criminal trial, or investigation of a criminal nature, shall, upon the Coroner, Judge, Police Magistrate, Justice of the Peace, or other judicial officer presiding at such inquest, trial, or investigation, certifying that the evidence of such Medical Practitioner was important, or likely to have been impor-

tant, at such inquest, trial, or investigation, be entitled to demand and to receive from the Treasurer of the County, City, or Town where such inquest, trial, or investigation was held, out of the funds in his hands in the County, City, or Town Treasury, the sum of five dollars for giving such professional evidence, together with five dollars for each day's, or part of a day's necessary attendance or detention during the time such inquest, trial or investigation was held; including among such days, the time necessary for travelling from and to his usual place of residence, to and from the place where such inquest, trial or investigation was held; and twenty-five cents for each mile of distance so travelled." Provision, as you will perceive, is made in the above for compensating Medical men for giving evidence at investigations before Magistrates, which involve as serious a responsibility and loss of time, as attendance at the Superior Courts. I was further desired to say that by doing this act of justice, you would earn the thanks of the whole Medical Profession in Ontario. I have the honor to be, Sir, Your most obedient servant, Thomas Pyne, Registrar, Secretary to Executive Committee College of Physicians and Surgeons, Ontario.

Executive Committee Room, Coll. Phys. and Surgeons, Ont. Toronto, 27th January, 1876.

On a Ready Method of Administering Fluids when the Jaws are Firmly Closed.—Dr. Burrall in the New York *Medicol Record*, Feb. 1876, says: A simple examination, which any one can easily make of his own buccal cavity, will show that posterior to the last molar teeth, when the jaws are closed, is an opening bounded by the molars, the body of the superior and the ramus of the inferior maxilla. If on either side the cheek is held well out from the jaw, a pocket or gutter is formed, into which fluids may be poured, and they will pass into the mouth through the opening behind the molars, as well as through the interstices between the teeth. When in the mouth they tend to create a disposition to swallow, and by this method a considerable quantity of liquid may be promptly given.

The New York Orthopædic Dispensary and Hospital.—At the annual meeting of the Board of Trustees of the New York Orthopædic Dispensary and Hospital, No. 126 East Fifty-ninth Street, held on Monday evening, January 10th, the following Medical Board was elected for the ensuing year: Consulting Surgeons, Drs. F. H. Hamilton, T. M. Markoe, Henry B. Sands, Stephen Smith, and William H. Van Buren; Consulting Physicians, Drs. William H. Draper, A. Jacobi, and John T. Metcalfe; Consulting Orthopædic Surgeon, Dr. C. Fayette Taylor; Consulting Oculist, Dr. C. R. Agnew; Consultant on Nervous Diseases, Dr. E. C. Seguin; Attending Surgeons, Drs. John G. Curtis, George A. Peters, Thomas T. Sabine, and Newton M. Shaffer; Orthopædic Surgeon, Dr. Newton M. Shaffer; Assistant Surgeons, Drs. S. A. Foster, George B. Packard, and A. B. Judson.

London Cabs.—The inconveniences of London cabs are minor evils; a far more serious objection to the popular Hansom is the fact that the passenger is on a level with the horse's head. The secretions of the animal's nostrils are exceedingly apt to be blown directly into the passenger's face, and it is not at all improbable that many cases of intractable irritation of the more exposed mucous membranes originate in this manner. But a much more dangerous disease sometimes results. Only a few months ago a well-known member of the Stock Exchange took glanders in this way, and only survived a few days. The case was seen both by Dr. Munk and Sir William Jenner, and there was no doubt as to its nature. As diseased horses are often driven in hackney carriages, we would suggest that a screen should always be placed in Hansoms, just above the splash-board.—*Medical Examiner.*

Canadians in London.—The following gentlemen, graduates of Trinity College Medical School, Toronto, were admitted members of the Royal College of Surgeons, England, on January 24th: McLarty, Colin, M.B., of St. Thomas, Ontario; Millman, Thomas, M.D., Woodstock, Ontario.

Removal of a Wounded Kidney.—M. Marvaud, Surgeon-Major in an Algerian regiment, relates (*Rev. de Méd. Militaire*, October) the case of a young Arab woman who had been severely wounded in the right lumbar region by means of a long knife or yataghan. The instrument, cutting only on one edge, had a thick back, and on withdrawing it the right kidney was also drawn out of the wound, between the lips of which it remained strangulated. There was considerable hemorrhage, but this soon stopped. A silk ligature was passed around the pedicle of the extruded organ, and at the end of some weeks the kidney was separated—the patient continuing in good health the whole time, and the secretion of urine being normal. She was discharged perfectly well two months after admission.

Medico-Legal Aspects of Abortion.—Dr. Leblonde (in *Ann. de Gynécol.*, August, 1875) has collected a series of eleven cases from which he endeavours to prove the medico-legal value of the integrity of the membranes in abortions in the early months of pregnancy.

His conclusions are thus stated :—

1st. When abortion occurs "en bloc".—*i.e.*, the embryo is contained in the sound membranes, which are unbroken—abortion is probably spontaneous, or at least has not been produced by agents which determine the expulsion of the ovum without implicating the membranes.

2d. When the membranes are ruptured, but healthy, in all probability abortion has been provoked.

3d. When the membranes present pathological alterations, we can form no conclusion from an examination of the expelled product, though probably the abortion results from disease of the ovum, and that it is due to spontaneous production.—*Obstetrical Journal of Great Britain.*

Personal. — Dr. Buller, M.R.C.S.E., late Resident Surgeon, Royal London Opthalmic Hospital, has located himself in Montreal, with the intention of practising as an oculist and aurist.

Ceratum Chlorali. — Pavesi recommends as a substitute for emp. diachylon co., and as particularly appropriate for an antiseptic dressing, the following cerate :—Emp. diachyl. co., 100-0 ; glycerine pur., 10-0 ; chloral hydrate, 15-0 parts. The plaster is melted in a porcelain dish by a gentle heat, removed from the fire, and the glycerine and chloral hydrate mixed intimately with it. The cerate may be shaped into tablets or rolls. Spread upon linen it is of a yellowish white colour, has a faint odour of chloral, and is strongly adhesive. Pavesi recommends the introduction of this cerate into hospitals, in which, in consequence of overfilling, pyæmia and similar affections are common. The plaster develops ozone, by which the microscopic fungi which are to be considered the cause of the maladies named are destroyed. How far this at present depends on experience or on theory is not evident. Pavesi is also of opinion that by reason of its anæsthetic properties the cerate merits trial in rheumatism.

Radical Cure for Piles.—Dr. A. B. Bowen, writes in a recent number of *The Record* : "My attention was directed to the treatment for nævus by hypodermic injection. From the similarity of the anatomical structure of nævus to hæmorrhoidal tumours, I was induced to try the remedy. In the latter I used carbolic acid and ergot (fl. ext.) in equal parts, injecting from ten to fifteen minims of the solution into the spongy, vascular hæmorrhoidal tumour. This was repeated about once a week for five or six times, when the tumour had entirely disappeared. I have tried this in several cases, and it acts like a specific."

It is generally understood in the insurance offices of the United States that the average length of life in that country is greater than in England, as shown by the English tables ; and this accounts for what would be otherwise unexplainable—the immense profits realized by the life-insurance offices there—the rates of insurance being chiefly based upon the English tabular estimates of life—another proof of the smartness of our cousins across the Atlantic.—*Medical Times and Gazette.*

The Localisation of Arsenic in the tissues of Poisoned Animals.—M. Scolosuboff, of Moscow, has made numerous examinations of the tissues of dogs, rabbits, and frogs, to which he has given known quantities of arsenic in their food. His experiments led him to the conclusion that arsenic, so far from being localised in the muscles, is specially taken up by the nervous tissue, and afterwards deposited, first in the liver, then in the muscular tissue. He therefore suggests that in cases of suspected poisoning by arsenic, especially if acute, the expert should first of all examine the brain and the liver.

An unfortunate lunatic, who died in the Prebetwitch Asylum a short time back, seems (says the *Standard*) to have lived neither wisely nor well. A *post-mortem* examination led to the discovery of no fewer than 1841 articles in his stomach, viz, 1639 shoemaker's sparables, 6 four-inch cut nails, 19 three-inch cut nails, 8 two and a half-inch cut nails, 18 two-inch cut nails, 39 tacks, 5 brass nails, 9 brass buttons, 20 pieces of buckles, 1 pin, 14 bits of glass, 10 small pebbles, 3 pieces of string, 1 piece of leather three inches long, 1 piece of lead four inches long, 1 American pegging awl—the total weighing 11 lbs. 10 oz.

The *Medical Press* gives an extract from the diary of the late Mr. Mewburn :—

"The following statement from the fee-book of Sir Astley Cooper is curious :—

"My receipt for the first year was 5*l.* 5*s.*; for the second, 26*l.*; the third, 64*l.*; the fourth 96*l.*; the fifth, 100*l.*; the sixth, 200*l.*; the seventh, 400*l.*; the eighth, 610*l.*; the ninth 1,100*l.*

"In 1815 Sir Astley made 21,000*l.*!! A Mr. Hyatt, an ancient merchant, gave him 1,000*l.* on recovery under his care; and Mr. Coles, of Mincing Lane, for a long course of time gave him 600*l.* every Christmas."

Rotunda Lying-in Hospital, Dublin.—Dr. Lombe Atthill has been chosen Master of this famous institution, in place of Dr. George Johnson, whose term of office had expired.

Syphilitic Urethral Discharges.—In "St. George's Hospital Reports," Mr. Henry Lee publishes a paper on this subject, and states that urethral discharges may be due to syphilitic infection, and may be either primary or secondary. (Our experience fully confirms Mr. Lee's observation.) The following two cases will suffice as a description: 1. A patient some days after having exposed himself to infection noticed a greyish discharge from his urethra; it was thick and resembled a solution of arrow-root in water. There was little or no pain in micturition, little or no swelling of the meatus urinarius. After some days the mucous membrane of the glans and the prepuce became at some parts the seat of an adhesive infiltration, which left, after some days, some induration. The inguinal glands became affected, and some weeks later symptoms of constitutional syphilis showed themselves. 2. A syphilitic subject married; sexual excitement determined a slight discharge from the urethra, accompanied or not by an ulceration of the mucous membrane. This discharge, Mr. Lee thinks, is contagious, and can give syphilis. Hunter had, then, reason to think that a urethral discharge could give syphilis, although he was wrong in believing that ordinary gonorrhœa was of a syphilitic nature.

Died, at Christiania, Norway, on the 10th of December last, Dr. Wilhelm Boeck, well known by his peculiar views in regard to the treatment of syphilis by syphilization. He had many friends, but made few, if any, converts to his practice.

Francis Simonds Scovil, of St. John, New Brunswick, has been admitted Member of the Royal College of Surgeons, London, England.

Births, Marriages, and Deaths.

BIRTHS.

At Forest, on the 18th inst., the wife of Alexander Scott, M.D., of a son.

At Churchill, Co. Simcoe, on Saturday, the 29th of January, the wife of Dr. R. Lund of a son.

In Stratford, on the 14th inst., the wife of Mr. J. Hanavan, M.B., of a son.

DEATHS.

At his mother's residence, No. 32 Carlton Street, Feb. 11th, 1876, J. C. McArthur, M.D., aged 28.

HENRY J. ROSE,

Manufacturing Pharmacist,

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Bougies, G. E	0 20
Catheters, Plated	1 00
" " Fem	0 75
" " Combination	2 25
Caustic Holders, Ebony	0 50
Cotton Bandaging, three inch, per yard	0 11
Dissecting Cases, 6 knives	6 00
" " 4 "	5 00
Elastic Stockings, pair	3 00
Enemas, from	0 60
Forceps, Liston's Art'y	1 00
" Bone, 8-inch	2 00
" Bulldog	0 06
" Midwifery, Barnes'	
" " Clark's	3 00
" " Robertson's	4 00
" " Elliot's	
" " Simpson's	5 25
" " Churchill's	3 50
" " Hodge's	7 00
" " Roberton's	
" Polypus	
" Tooth 75c. and	1 75
Knives, 4 blades	2 50
Gum Lancet, 2 straight and 1 curved	
Lancets—Abscess	0 60
" Bleeding	0 50
" Gum	0 75
Laryngoscope	6 30
Lithotrite	22 00
Magnet Machines 6 50, 7 80 and	10 75
Needles, Straight, Curved, or half-curved, doz	0 60
Perforator, Denman's	1 50
Pessaries, Hewitt's	$0 50
" Hoffman's	1 40
" Inflating, Oval and Round	0 65
Inflators for do	0 50
" Hodge's	0 70
Pocket Cases 13 50, 19 80, and	27 30
Poroplastic Sheeting for Splints lb.	2 30
Physicians' Med. Cases, Leather.	
16 2-drm. Vials	1 25
20 Vials, $1 50; 24	1 75
Spray Producers, Steam	6 00
" " Boston	2 50
Scissors, Curved, 80c.; Tonsil	2 50
" Elbow	1 10
" Probing	0 90
Speculum, Glass	0 75
" Bivalve	6 20
" Duckbill, improved	4 75
Stomach Pump 7 00 and	9 25
Stethoscopes, Cedar	0 50
" Ebony	1 25
" Camman's Binaural	7 00
Suture Silk (Spool)	0 60
Tenaculum	1 00
Tooth Keys	2 25
Sea Tangle Tents, doz	1 25
Tongue Depressor, Codman's	1 50
Tourniquet	1 35
Tracheot. Tubes 2 10 and	2 50
Trocar, Hydrocele	1 35
" Ascites	1 75
" Abdom	2 20
" Curved	3 35
Tonsil Guillotine	10 50
Thermometers, self-register	2 50
Vaccinator, Codman's	3 50

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THE

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A MONTHLY JOURNAL OF BRITISH AND FOREIGN MEDICAL SCIENCE, CRITICISM, AND NEWS.

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☞ All Communications, Letters and Exchanges must be addressed to the Corresponding Editor,

TORONTO, APRIL, 1876.

Selections: Medicine.

REMARKS ON

A CASE ILLUSTRATING THE OCCASIONAL PROTRACTED COURSE OF MALIGNANT (SCIRRHOUS) DISEASE OF THE STOMACH.

BY I. BURNEY YEO, M.D., M.R.C.P.,

Senior Assistant Physician to King's College Hospital; Assistant Physician to the Brompton Hospital.

The following case, besides being interesting in many of its details, affords proof of a fact which is perhaps not very widely known—viz., that scirrhous disease of the stomach occasionally runs a very protracted course, and extends over a period of ten, fifteen, or even twenty years. The patient in question died in 1874; he first suffered severe gastric pain in 1857.

For the first part of the history of this case I am indebted to the kindness of Dr. Wilson Fox, who was consulted by the patient in August, 1868, he being at that time fifty-five years of age.

The following are Dr. Wilson Fox's notes :—"He first felt severe gastric pain in 1857, relieved by sulphuric acid, but it continued at intervals until 1861, when it increased in severity and became attended by acid vomiting. The vomited matters were never black or bloody. Fæces at this time black but not tarry; appetite lost. In the spring of 1868, after suffering from pain, great weakness, and loss of appetite, he suddenly became faint. The stomach became distended and painful, and the pain radiated across the chest. At this time he passed tarry stools repeatedly on several occasions, and they were seen, certainly on one occasion, by Dr. Grimsdale, of Liverpool. He suffered from frequent vomiting after food. His attacks of vomiting were associated with anorexia; these attacks would last for about a week, when the appetite would return and become ravenous. The vomited matters were acid, but not frothy, nor had they even the appearance of coffee-grounds. There was no increase of pain before passing the tarry evacuations. He stated that the pain in 1861 used to be relieved by eating, and would return three or four hours after food."

Dr. Fox further noted that the patient presented at this time an appearance of intense pallor; that there was no tenderness or tumor in the region of the stomach; that there were no piles, though he had suffered from them some years ago. The diagnosis was "carcinoma ventriculi."

The patient first consulted me in November, 1870, and complained of symptoms of dyspepsia. He told me of the unfavourable opinion Dr. Wilson Fox had formed of his case in 1868, but added that he had subsequently consulted a very eminent physician in London, who had given him a more favourable opinion, which he was himself disposed to accept—viz., that he was suffering from functional dyspepsia.

He was a gentleman of very great energy both of body and mind; he was in the habit of taking very active exercise, and of consuming a large amount of food, and his chief trouble was severe pain, with flatulence and acid eructations on going to bed at night—i.e., three or four hours after his dinner.

There was no tenderness or tumour in the region of the stomach or over any part of the

abdominal cavity, but he was emaciated, and had a pinched and unhealthy aspect.

A day or two after first consulting me he was seized with very severe pain, and I was sent for to see him, but being out of town he passed under the care of a homœopathic practitioner at Highgate, where he lived, and I saw no more of him until the autumn of 1873. In October of that year he called on me to tell me he was quite well, that the *fons et origo mali* (I use his own words) had been discovered. That the fact was, he had all along been suffering from gall-stones, and that two seasons at Carlsbad and a winter in Algeria had set him right. He did not mention then, what I discovered subsequently, that he had been taught to use morphia hypodermically for the relief of the stomach pain, and to this fact must be attributed much of the obscurity which appeared hereafter to hang over his case.

He passed through the winter of 1873-74 comfortably, in the firm belief that all his previous sufferings had been due to gall-stones, and that, should they ever return, he had a certain resource in the Carlsbad waters.

In April, 1874, I was asked to see his wife at Norwood, and, observing that he was not well, I was told, incidentally, that he was suffering from another attack of gall-stone, but that he knew quite well how to manage himself: he was drinking a large quantity of Carlsbad water; and when the pain was very severe, he obtained certain relief by the injection of morphia hypodermically. I was simply referred to by his wife to know if it was right for him to have recourse so constantly to this mode of relieving his symptoms: a question which was then, and on many subsequent occasions, pertinently answered by the patient, who demanded why he should be allowed to suffer pain when an easy and safe means of relieving it was in his own hands.

I did not see him again until the end of the following month (May, 1874), when I was summoned to see him as he was passing through town on his way to the north. I found him very ill, suffering intense pain in the stomach, vomiting everything he took, and passing black motions, consisting of fluid and solid matters, the latter composed partly of broken-down scybala and partly of black gritty powder. The pulse was weak, and the tongue red and thinly covered with a brownish fur. The superficial arteries were markedly atheromatous. I asked to see the matters vomited, and found them to consist wholly of the farinaceous foods which had been given him; but on the surface of the vomit I noticed a few small patches of brownish scum, which, on closer examination, appeared to consist of mucus stained with blood. I removed these, and, together with my friend Dr. Lionel Beale, examined them under the microscope; and we found entangled in a fibrinous coagulum, numerous large nucleated cells precisely like cancer cells.

The more urgent symptoms yielded rapidly to appropriate treatment. I limited his food at once to animal jellies and fluids, such as could be completely or chiefly absorbed in the stomach, and forbade entirely the use of farinaceous food, which would have to pass out of the stomach before they could be digested. This obvious precaution was attended with immediate and entire relief of the vomiting. The rest of the treatment consisted in the use of creasote, lime-water, hydrocyanic acid; still, also, the hypodermic injections of morphia, to relieve the severe pain; but these were now alternated with doses of chloral and bromide of potassium combined, which quieted his nervous system and procured sleep. Thus we were able to diminish considerably the amount of morphia employed. He recovered rapidly from all the symptoms, except the gastric pain, which I noticed again and again was rarely or never absent, except when it had been quieted by the hypodermic use of morphia. Under these circumstances his friends objected to accept the very unfavourable prognosis I felt bound to give, and I was repeatedly urged to adopt the gall-stone theory as sufficient to account for all his symptoms. Three or four dark-looking, irregular concretions were produced which had formerly been passed, and which we were told were gall-stones. These were submitted to analysis, and were reported to contain no cholesterin, and "to present more the character of urinary than biliary calculi." I had the advantage of consultation with two very eminent physicians, and they both felt uncertain as to the precise nature of the case,

and were both more disposed than I was to give weight to the evidence in favor of gall-stones as the "*fons et origo mali*," as the patient was fond of expressing it. At any rate he rapidly mended, and left London about the end of June for the north. About six weeks later I heard from him, to the effect that he was much better, that he had "turned the corner," and that he was about to start the following day for Sweden. His brother-in-law, however, wrote to me that "he thought him in a bad way when *not* under the influence of morphia."

The sequel of this case is told in the following report of his last fatal illness and the post-mortem examination by Dr. C. Forsenius, of Gothenburg :—

"Mr.——, sixty-two years old, arrived at Gothenburg, in Sweden, from the little bathing-place Sârâ, on the 29th of August, 1874, in a comparatively good state of health. The sea-air and the voyage excited an unusual appetite, for which reason he took a rather copious breakfast, and ate also afterwards a good dinner. The same day, at eleven o'clock in the evening, he was suddenly affected with pain in the stomach and sickness. In the night he made a subcutaneous injection of morphia ($8\frac{1}{2}$), and fell asleep. I was called at 4.30 a.m., and found him then in a soporous state, with very dilated pupils, with a scarcely perceptible pulse, of about 130 beats in the minute, with cold bluish hands and feet, with the belly very swelled, hard, and tympanitic. I then at once considered it to be a peritonitis from a perforating ulcer of the stomach, and ordered only to put a flannel moistened with oil of turpentine and a warm poultice on the belly. At my next visit, between ten and eleven o'clock in the forenoon, he was in agony, and died soon, very quietly. On the 31st of August, thirty hours after death, I made a post-mortem examination in company with Dr. Ewart, and we found then all signs of death, the body exceedingly meagre, the belly very swelled, the intestines covered with a viscid lymph, distended by gas, and in the upper part lively red; the ventricle, or stomach, very large and dilated, had a hole or perforation in the minor curvature, near the cardia, of round form and with rounded edges, of about the size of a sovereign, which had been covered by the underside of the liver, to which it had been lightly adherent; its mucous membrane was grayish and sloughy, with dark spots and striæ of extravasated blood. The pylorus and the upper part of the duodenum were indurated and contracted, so that only the end of the little finger could be enforced in the passage, and the wall was there nearly half an inch thick. The liver was rather diminished in size, more dark and dense than usual. The gall-bladder was enlarged, as also the gall-duct (choledochus), but contained at present no gall-stone. The head of the pancreas was also somewhat enlarged and indurated as the surrounding duodenum. The heart was of diminished size and contracted, empty from blood; its mitral valve was white and a little thickened; the aortic valves were ossificated, and the aorta was dilated to the double of its natural size (aneurisma), with many small atheromatous patches on its inner side. The lungs were otherwise healthy, but had in the agony been œdematous. There was also in the serous sacs of peritoneum, pleura and pericardium, yellow, watery exudations. He had even very large hemorrhoidal piles yet bleeding after the death."

I am much indebted to Dr. Forsenius for this careful and excellent account of the post-mortem examination.

The issue of this case possessed very great interest for all those who had seen the patient professionally during life, and were acquainted with his medical history, and it seems to me that there are many points of general interest to be noticed in it.

In the first place, it shows that scirrhous disease of the stomach may run a very protracted course, extending over a long series of years, and that the patient may enjoy long intervals of apparently perfect health. This latter fact was strongly dwelt upon by one of the physicians whom he consulted as a counter-indication of the existence of malignant disease. Here seventeen years elapsed between the first onset of gastric troubles and the fatal illness. In the second place, we learn the striking efficacy of judicious treatment in relieving the symptoms attending this disease. The benefit derived from the Carlsbad course was remarkable, and lasted for some time. We can easily understand

how a carefully restricted diet, and a daily washing out of the stomach and intestines with large quantities of warm, alkaline, aperient fluid should have the effect.

The hypodermic injection of morphia doubtless also contributed much to the patient's comparative comfort, although it at last lulled him into a false sense of security, masked important symptoms, and induced the most careful clinical observers (who had not the same advantages that I had of watching him from day to day) to hesitate to give an entirely unfavourable prognosis of the case.

The immediate cessation of the gastric irritation and vomiting on the change from farinaceous food to animal fluids and jellies which could be absorbed in the stomach, was a strong indication of the existence of obstructive disease at the pylorus, and it points to a fact that is often overlooked in practice—viz., that in some conditions of gastric and intestinal disorder, soft farinaceous foods are by no means easy of digestion.

Another point of interest in this case was the supposed existence of gall-stones as the original and sole cause of the symptoms. This opinion was put before us with so much circumstantial detail by the patient and his friends, and the success which had followed the treatment based on this opinion was pointed to as so evident; the actual passage of what were supposed to be biliary calculi; the long periods of freedom from suffering; the absence throughout the whole case of any local tumor or evident tenderness; all these facts naturally led us to give great weight to the considerations whether or not the symptoms could be thus satisfactorily accounted for.

When, however, I observed the other obvious features of the case, at the time when I had the opportunity of seeing the patient daily, the constancy of the pain, except when under the influence of morphia, coming on the instant the effect of the morphia passed off, the striking change in the symptoms produced by the change of diet, the persistent appearance of black stools, and, above all, the presence of bodies, having a perfect resemblance to cancer-cells, in some fragments of mucus on the surface of the vomit,—these facts assured me that although gall-stones might coexist, or might have existed, we had to do with a case of malignant disease of the pylorous running a somewhat unusual course.

Protracted as was the course of this case, there seems to be good reason for believing that had this patient realized fully the serious nature of his malady, and being willing to remain under medical supervision and direction; had he, in short, adopted the habits of an invalid, taken only such food as was ordered him, instead of travelling about as a sound man, and eating heartily of any food he felt disposed, his life might have been prolonged much longer. As it is, I think the case an important and instructive one, as illustrating a probably not inconsiderable class of cases in which malignant disease of the stomach exists for many years before coming to a fatal issue.—*London Lancet.*

CAPILLARY PUNCTURE OF THE INTESTINES IN TYMPANITES.

An interesting article in the *Bulletin Medical du Nord*, by Dr. Cuignet, contains the following points:

1. The puncture should be made by giving a rotary motion to the needle, which is held between the fingers at the surface of the body.

2. It can be perceived the moment the needle reaches the gaseous cavity, as well as the moment it touches the opposite wall, thus showing the exact dimensions of the cavity.

3. The gas does not escape spontaneously, however distended the cavity may be which contains it, but it must be withdrawn by aspiration.

4. Only the fold of intestine in the immediate vicinity of the puncture is evacuated, but all of the folds of the intestine must be punctured to obtain any considerable relaxation.

5. Each fold, as it is punctured, collapses, and its place is filled by the two folds above and below it, which maintain all the tympanites in the same region, until they also are punctured.

6. Either the gas alone may be withdrawn, or both the gas and the liquid matter in the intestine, by graduating the depth to which the needle is made to penetrate.

7. It is esteemed prudent to always extract the liquid in the vicinity of the puncture.—*La Tribune Medicale.—St. Louis Med. Record.*

ON THE OCCURRENCE OF RENAL TUBE-CASTS IN NON-ALBUMINOUS URINE.

BY JAMES FINLAYSON, M.D.,

Physician and Lecturer on Clinical Medicine to the Western Infirmary, of Glasgow.

THE habitual occurrence of renal tube-casts, without albuminuria, in cases of jaundice, while forming an interesting feature in this affection, raises some important questions as regards tube-casts themselves, and the significance to be attached to them as signs of renal disease.

In a "Report on Renal Cases" in 'The Glasgow Medical Journal' for January, 1874, I called attention to the occurrence of tube-casts in non-albuminous urine, citing a case of jaundice, a second case where the urine was loaded with urates and dumb-bell oxalates, and a third which seemed to resist explanation, but in which there was some suspicion of renal calculus. Since then my attention has been more or less constantly directed to the subject, and several cases throwing some light on the matter have come under my notice, partly in the hospital, but chiefly in private. . . .

The tests for albumen relied on were those so long and so well tried in clinical work, viz.—(1) heat and cautious acidulation with acetic or nitric acid, and (2) nitric acid poured gently to the bottom of the cold urine, care being taken to allow some time to elapse before the absence of albumen was pronounced. . . .

The six following headings cover nearly all the cases which I have observed bearing on this subject:—

I. *Tube-casts may be found in the sediment of urine, which contains so little albumen that great care is required to bring out the reaction.*

Without going into details, I may say, generally, that tube-casts associated with these minute traces of albumen occurred in a great variety of different diseases, and in urine in which the albuminous reaction seemed due to minute quantities of blood, as well as in other more ordinary cases.

II. *Tube-casts may be found in samples of urine passed at times when the albumen has temporarily disappeared.*

In a case, for example, of parenchymatous nephritis, resulting in contraction of the kidneys, I found that in the progress of the illness the amount of albumen diminished, and for a few days none could be made out; it reappeared, however, in small quantity for two or three weeks before death. *Tube-casts were present in the urine throughout, even when no albumen could be detected by the tests.* . . .

III. *Tube-casts may be found in urine which has been albuminous, but in which the albumen has disappeared for a considerable time, so that we may be in doubt how far the kidneys are restored to their normal state.*

An old lady (æt. 75), subject to chronic rheumatic arthritis, and suffering from severe pains in the left leg resembling sciatica, was found, when I first saw her in January, 1874, to have œdema of the feet, and to be suffering from very frequent micturition, with a sense of straining, and her urine was supposed to have been at times bloody. On examination of two samples, I found a considerable sediment of pus in both; both were albuminous and acid to litmus; specific gravity 1018. Tube-casts were found in the sediments; some of them presented distinct fatty specks; pus-corpuscles, likewise, were seen, but no blood or crystals. The patient subsequently had a severe bronchitic attack, from which she recovered, although still tormented by her rheumatic pains; but I was surprised to find that the albuminuria had ceased in one so old, as I supposed the renal disease likely to continue till her death. She remained, with but little change, almost constantly in bed till November 16th, when she rather suddenly became very drowsy and confused, without any marked alteration in the pupils; indeed, she seemed to be sinking. Still impressed with the idea of renal disease, I procured a sample of the urine, but *I could not establish the presence of albumen;* although a very slight opacity occurred on heating and acidifying, no reaction was obtained with nitric acid in the cold. The colour was good, and the sp. gr. about 1020; under the microscope pus-cells were still found; *tube-casts, some granular and some distinctly fatty, were found without much difficulty.* She rallied from this alarming condition (the real nature of which remained doubtful), and still continues much as before. In January, 1875, the urine was found turbid; it still contained

pus, but neither albumen nor casts were detected. Another examination in August last gave likewise a negative result. . . .

IV. *Tube-casts are found occasionally in non-albuminous urines which are loaded with urates and urea.*

In my "Report on Renal Cases," already referred to, I gave one case coming under this description in which the urine was loaded with urates and octohedral crystals of the oxalate of lime, with a few dumb-bell forms; in this case tube-casts were found, although no albumen could be detected. Since then a remarkable case has come under my notice which may be placed in the same class. A young man was suddenly seized with an inflammation of the cæcum, and on the second day of the illness the urine was examined and *found non-albuminous; and, though frequently examined since then, no albumen has ever been detected.* The specific gravity, however, was high—1035. On testing for sugar a very marked reduction of Fehling's solution was produced by a few drops of the urine.

V. *Tube-casts are found in the urine in cases of renal calculus and gravel, associated with blood, pus, and albumen in variable and sometimes very minute quantities, and occasionally with a complete absence of albumen, as judged by the ordinary tests.*

A lady was seized, for the first time, with the typical symptoms of renal calculus on the 7th of December, and the urine was found on the 9th to be loaded with urates, and to have abundant crystals of oxalate of lime; no blood-corpuscles were seen; the reaction for albumen was uncertain, only a slight cloudiness was detected on heating and adding acid. On the 15th a trace of albumen was entered in the notes; the urine was acid, and urates were thrown down on adding acid to the cold urine; the specific gravity was 1029; no distinct blood-corpuscles could be made out, but a few tube-casts were seen, chiefly hyaline, a few contained some renal epithelium; loose renal epithelium was present in considerable quantity.

A number of medical men in Liverpool have signed a memorial certifying, from a medical point of view, that prolonged standing is, in many cases, injurious to the health of shop assistants.

ACUTE PNEUMONIA OF THE APEX OF THE RIGHT LUNG; PHYSICAL SIGNS SIMULATING EXCAVATION; RECOVERY.

(Under the care of Dr. WILKS.)

There is at present in Stephen ward a man convalescent from an acute affection of the right lung, that at one time so closely simulated excavation that it was impossible, from physical examination alone, to decide whether the patient was suffering from phthisis pulmonalis or not. The history of the commencement of the illness and its duration seemed to point to an affection of the lung partaking of the nature of acute pneumonia, and the result has justified the opinion expressed at the time by Dr. Wilks, that the disease from which the patient was suffering was pneumonical rather than phthisical, notwithstanding the strong testimony afforded by the physical signs that the man was really consumptive. Cases in which such a difficulty in diagnosis presents itself are not common, but they are by no means rare. Simple uncomplicated instances of acute pneumonia of the base occurring suddenly in persons previously quite healthy cannot, as a rule, present many difficulties; but when pneumonia commences less abruptly at the apex or affects this part as well as the base, in persons not previously very robust, absolute certainty of diagnosis is often for a time impossible. These facts should never be lost sight of in considering the serious question of the diagnosis of phth isis and the still more important one of prog nosis. When the subject was raised three years ago, as to the contraction and cicatrisation of pulmonary cavities, it may be remembered that many competent and trustworthy authorities expressed grave doubts as to the practicability in some instances of distinguishing with certainty between excavated and solidi fied lung. Some relied on one sign, some on another, but there was by no means an agreement as to the value to be assigned to any one sign or even set of signs.

The case that has given rise to these remarks is that of a fair-complexioned, thin but muscular man aged thirty, who was admitted into Stephen ward on January 7th, looking pale, distressed, anxious, and evidently very ill. His breathing

was short, rapid, and difficult, and he was troubled with a severe cough and copious expectoration. It was ascertained that he was married, of moderately temperate habits, and of good general health, for although he was a waterside labourer, exposed to all kinds of weather, he had never before been ill, except when a child he had a fever. His father is living, aged sixty-three and healthy, but his mother died of mammary cancer some years ago.

On January 3rd the patient was seized with sudden shivering and pains in the limbs. Next morning he felt great pain in the right side, especially on coughing. The respirations were short and rapid, and he coughed and expectorated a great deal. It was not, however, until January 7th that he applied at the hospital, where he was at once admitted in the condition already described. On examining the chest dulness was detected over the right front to the mammary line. The breathing was bronchial, there was marked bronchophony, but no crepitation. Behind, on the right side there was dulness extending down to the angle of the scapula; there were bronchial breathing, bronchophony, and some fine crepitation on deep inspiration beneath the scapula. Temperature 103°; pulse 112; respiration 36. One ounce of brandy-and-egg mixture was given three times a day, and milk diet was ordered.

On Jan. 9th the morning temperature was 104·4°; pulse 120, small and wiry; respiration 38, quick and shallow. The physical signs were unaltered, and there was no pain in the chest; the tongue was furred in the centre, but moist; the cheeks were flushed, and the skin hot and dry; heart sounds healthy; there was great thirst, and much expectoration, which was rusty and tenacious; urine acid, chlorides diminished, sp. gr. 1018, and containing a slight trace of albumen.—Evening temperature 104°; pulse 120; respiration 44.

On Jan. 10th there was complete dulness of right chest, back and front, tactile vibration was diminished, and the breathing bronchial. Temperature 103·2°; pulse 112; respiration 40.

On the morning of Jan. 11th the temperature was 102·6°; respiration 108. The brandy-and-egg mixture was ordered to be given every four hours, and ten grains of compound ipecacuanha powder at night. Beef-tea ordered.

On Jan. 17th the patient was much better; the dulness had diminished. There was loud, harsh respiratory murmur all over the right chest, and some moist râles at the base on the same side.

From this time the patient rapidly improved, the temperature soon became normal, the dulness gradually subsided, and all the physical signs resumed a natural character. He gradually regained strength, and declared on Monday last that he felt quite well.—*London Lancet.*

Pathology of Chorea.—At a meeting of the Royal Medical and Chirurgical Society, Dr. Dickinson read a paper on this subject. In seven fatal cases which he had observed, he came to the conclusion that the changes were all connected with vascular disturbances. The injection in the arteries was very marked; the degenerations were usually periarterial, and the spots of sclerosis similarly placed. These changes affected both brain and cord, the cord most severely. Whether in brain or cord, the changes on two sides were symmetrical. The parts of the brain most usually attacked lay between the base and the floor of the lateral ventricles, and in the track of the middle cerebral arteries. In the cord the changes attained their maximum in the posterior and lateral parts of the gray matter, and in the upper portions of the cord. The prominent fact brought out by twenty-two fatal cases examined after death, and seventy cases under observation during life, was the frequency of mitral endocarditis in connection with the disease. This duplex relation between the nervous and the cardiac disorder was discussed with the conclusions that chorea was not in any way, either embolically or otherwise, a result of endocarditis, though associated with it, as having a common origin in rheumatism; while endocarditis was continually a result of chorea. Dr. West thought at present we were not in a position to establish from pathological observation alone the nature of a disease in which the mortality was so small as one per cent. Dr. Jackson still maintained the idea that embolism was the cause of chorea. Dr. Dickinson replied that there were certain spots, both in the brain and cord, which were specially affected, and that the symmetrical distribution of these was a strong argument against the embolic view. Further, that chorea will occur independently of heart affection. —*London Lancet.*

Surgery.

OPERATIVE TREATMENT OF HIP-DISEASE.

BY THOS. ANNANDALE, F. R. S. E.

Mr. Annandale is a thorough believer in the use of antiseptics and the knife for purposes of diagnosis and treatment, and does not hesitate to lay open the hip in any case in which there is doubt as to the exact condition of the joint. He relates twenty-two cases to illustrate the success of his method, but *we* are not yet quite prepared to go all the way with him in excision, having strong faith in rest and extension as now obtainable by the improved methods of American surgeons. He says :—

I advocate an antiseptic incision in all cases of hip disease in which signs of suppuration are present ; and if an examination of the joint by this means determines that destruction of the articular cartilage of the head of the femur and caries of the bone exist, I advise the immediate excision of this bone, believing that the removal of this bone will, in the large majority of cases, check further disease and allow the patient to recover with a useful and movable limb. Should the disease be limited to the head of the femur, and not involve, or only affect slightly, the acetabulum, it is, in my opinion, only necessary to take away the head of the bone by sawing through its neck. If more than the head of the femur is affected, or if the acetabulum is deeply involved, then it is advisable to take away the great trochanter as well, in order to allow the free escape of pus from the acetabulum, or from the pelvis, if the former should have become perforated. Cases of acute and rapid disease of the hip-joint have generally been considered unsuitable for the operation of excision, but the complete success obtained in one case, which was a most acute form of the disease, proves that this idea has been erroneous. When the antiseptic examination of a suppurating hip-joint determines that the articular cartilage and bone are unaffected, or only slightly involved, the excision of the bone will not be required ; for a careful antiseptic treatment of the wound, with perfect rest of the joint, will, I believe, result in a good recovery in most cases, If, however, the articular surfaces are markedly involved, I strongly advocate excision, as I do not believe that even the use of antiseptic treatment will cure disease of the cartilage or bone, when it has once become thoroughly established, so as to have a movable joint. The excision of the head of the femur in more advanced cases of hip-disease, and where external sinuses exist, although not so favourable in its results as when performed in the earlier stages of the disease, is a proper and justifiable operation, and I believe that even in these cases much may be done to lessen the mortality by thoroughly scraping the lining membrane of the sinuses according to Volkman's plan, and then dressing the wound antiseptically. In such cases it is important to take away the diseased bone freely, so as to remove as completely as possible all source of irritation, and also to allow the free escape of pus from acetabulum or pelvis. Before performing excision in any case of hip-disease it is essential to ascertain the condition of the internal viscera. Should these be seriously diseased, operative interference is not advisable ; but I do not myself consider slight and inactive affections of these viscera as necessarily a bar to operative interference, especially if the local disease is causing profuse discharge or irritation.

METHOD OF OPERATING AND AFTER-TREATMENT.

Abscesses connected with hip-disease require to be opened in the most suitable situation, and external sinuses enlarged if need be ; but when making an exploratory incision into a suppurating hip-joint, I find it most convenient to enter the knife immediately above, and in a line with, the posterior margin of the great trochanter, and to make an incision long enough and deep enough to allow the finger to pass into the joint. If, then, it is considered advisable to excise the head of the femur, sufficient space will be obtained by extending the wound upwards and downwards for about two inches each way. Should the trochanter require to be removed, the incision should be carried downward an inch or two more. If any portion of the acetabulum requires to be taken away, an incision across the centre of this longitudinal

one will best expose the cavity. Having in the incision advised divided the skin and cellular tissue, I introduce a strong probe-pointed bistoury, and cut across the attachment of the muscles close to the bone, saving their periosteal connection as much as possible. This division of the muscles allows the head of the bone to be turned out to a sufficient extent, and its neck sawn through by a fine narrow saw. In this way the head of the bone can be removed with little disturbance of the surrounding parts—a circumstance which must assist in making the resulting new joint more perfect.

If the trochanter and neck require also to be sawn off, the division of the muscular attachments must be more free; but, even in this case, I think it of consequence to interfere as little as possible with the neighbouring tissues. Few or no arteries of any size are wounded in this method of operating, and it frequently occurs that not even one ligature is required.

In my early cases I found that the posterior flap of the wound had a great tendency to fall down, and so separate its edges; but I now find that the introduction of two or more button-sutures in addition to the ordinary superficial ones, successfully counteracts this.

I have further to add, that I strongly advocate antiseptic precautions during the operation, and the antiseptic treatment of the wound afterwards, and, also note the importance of having a free escape—by the use of drainage-tubes—of pus or other fluids from the deep part of its cavity. In addition to the usual antiseptic treatment, I always apply freely to the exposed articular surfaces or bone, De Morgan's solution of chloride of zinc. The after-treatment of the operation is of the most simple kind, and consists in supporting the limb in the extended position with one or more sand-bags or pillows; or, if there is any tendency to contraction, drawing up of the limb, or painful startings, the application of extension by means of a light weight is useful. Gentle movements of the new joint should be commenced at the end of three weeks, unless there is any painful symptom or condition of the wound which forbids it; then the movements should be employed as soon as this condition or pain has passed off. When the wound is healed, or nearly so, the patient may be allowed to sit up or use crutches. In cases in which the limb was weak, I have used with advantage some form of wire or other splint while the patient was in the upright position, but in the majority of my cases this support was not required. The time of recovery, after excision of the head of the femur, varies according to the condition of the parts before the operation and according to the strength of the patient. The progress is usually slow, and I should say that from four to five months is the average time that a case of hip-excision requires for its recovery. Should the wound be slow to heal, or should sinuses continue to discharge, a careful search with the probe or finger ought to be made; for portions of dead or diseased bone are frequently the cause of this condition, and their removal is necessary for the proper healing of the wound or sinus. When the patient is able to bear weight on the limb, it is necessary to add to the boot or shoe a raised sole of light material, in order to compensate for the shortening resulting from the operation. This shortening is usually from two to three inches.—*Edinburgh Medical Journal.*

Atropiæ Sulphas in Acute Myringitis.—Dr. A. N. Ellis, Assistant Surgeon U.S. A. *(Amer. Jour. of the Medical Sciences)*, says: "Having been very familiar with the effects of the active principle of belladonna in painful and troublesome affections of the eye, I was led to use it in acute inflammation of the drum. About one year ago a soldier, standing near a cannon while the piece was being fired, suddenly experienced severe pain in the head accompanied with hemorrhage from the ears. His sufferings were great. I saw him about six hours after the accident occurred. After carefully syringing the ear illumination showed fracture of the malleus and the seat of the hemorrhage. Acute inflammation of the drum supervened. Placing the patient in bed, a few drops of a solution of sulphate of atropia (four grains to one ounce of water) were dropped into the ears, six more upon the mastoid process. The effects were all that could be desired. Since that time I have used the atropia in many cases of myringitis, and in every case with the best results. I am convinced that the prompt use of the remedy, conjoined with that of leeches and perfect rest in the recumbent position, will in almost every case give instant relief, thus arresting perforation of the drum and consequent suppuration."

DIAGNOSIS OF SPINAL DISEASE.

BY THOS. P. GRANT, M.D.

The difficulty of differential diagnosis in spinal disease in its earlier stages not unfrequently perplexes the most experienced practitioner. It is a common thing to hear persons, and sometimes even medical men, say there can be no disease of the spine, because there is no pain or tenderness along the spinal column. An absence of pain at the seat of disease is so characteristic that Dr. Chas. F. Taylor, a practitioner of large experience in this and kindred diseases, says, "There *never is any pain in the back* in spinal disease." But in point of fact both pain and tenderness have been found in some well-marked cases of Kyphosis. Both the rational and the physical symptoms of Pott's disease of the spine are so characteristic and generally so well marked as to enable a careful observer to detect them, and pronounce with almost unerring certainty upon the character of the disease, even in the absence of angular curvature. Among the earliest rational symptoms is a listless, anxious expression of countenance, notable at first only at intervals and generally after exercise or some sudden jar. As the disease progresses a sad, careworn, melancholy expression becomes habitual; the patient is quiet, lies or lounges around, and will not join in the sports of his companions, or does so for but short intervals, and complains of weariness and perhaps of headache, slight colic, or pain in the side or chest, or pain in the thighs. If a child, he will be inclined to lie across his mother's lap or a chair, or rest his elbows; and if the point of attack is in the cervical or upper dorsal vertebræ, will be inclined to rest his head on his hands. The digestion is usually impaired, the bowels irregular, and the urine charged with urates.

If the seat of disease is in the lower dorsal or lumbar vertebræ, the pain will be most felt in the hypogastric or iliac regions, and may be mistaken for *colic*. If it be in the cervical or upper dorsal vertebræ, there will be sharp intercostal pains.

The action of the heart is usually quick and irregular, and as the disease progresses becomes irritable. This disturbance, together with the characteristic intercostal pains, often cause an error in the diagnosis, and cardiac trouble of a serious character is apprehended. A half suppressed sigh and an occasional catching of the breath during respiration may be often noticed. The sleep becomes uneasy and accompanied with more or less moaning

Among the first physical symptoms the observing practitioner will notice is a great caution in moving about. Sometimes the toes are adducted and the knees bent. In picking up any object the patient will flex the knees and thighs rather than bend the back, taking care to steady himself with one hand. He walks with the head and shoulders thrown back or to one side in a stiff, awkward manner, and with a cat-like step.

The clothing being removed and the patient told to stand erect, there is generally more or less lateral curvature. This lateral curvature almost invariably precedes the angular curvature. The abdominal walls will usually be found to be relaxed, and the adductor muscles of one or both thighs contracted. The patient will soon become fatigued in standing, and complains of pains in the sides or chest as above mentioned.

This state of case may continue for some time without any visible change, and then the disease run rapidly on, causing great constitutional prostration, carious destruction of the bone, generally a deformity, and sometimes paralysis and death.

Deformity usually appears some time after the lateral curvature as a slight projection of a single spinous process; this gradually enlarges, and an angular curvature is established unless relief is obtained. The symptoms are then so well marked that they can not be mistaken, unless the disease is situated in the cervical regions. Here the upper compensating curve is immediately above the point of disease, the head thrown back or to one side. The trapezii, the splenii, the sternocleidomastoid muscles, and the posterior and lateral mucles of the neck are drawn so tense that they cover or hide the angle in the spinal column, and thus render the diagnosis more difficult and the exact seat of disease obscure; but the same careful walk and disposition to rest the head will be observed, and sometimes a great difficulty in respiration and deglutition.

I call to mind a case brought to my father by Dr. D. W. Yandell, who was the first to diagnose cervical curvature. This child was anæmic beyond belief, and apparently about to die of inanition, yet her respirations could at times be heard all over the house. In most cases of cervical curvature a partial or a total paralysis of the extremities rapidly supervenes, due to a pressure of the diseased bones on the contents of the spinal canal. This fact has been disputed, but I am unable to discover the slightest ground for a reasonable doubt.*

Among patients with cervical curvature I have seen one case of paralysis of the upper extremities, and five cases of paralysis of the lower extremities, and three cases in which both upper and lower extremities were paralyzed. In each case the paralysis was relieved by relieving the pressure on the spinal cord. In some of these cases the paralysis was complete, extending even to the nerves of sensation.

These are some of the principal characteristic symptoms of Pott's disease of the spine. They are often slight, and are seldom all seen in any one case; but attention to these characteristics will aid the practitioner in a differential diagnosis of this disease, and enable him to seek proper remedies before great deformity has supervened; but I have known one case in which all the usual symptoms were wanting, or so slight as to escape observation, till after the disease had made considerable progress, and a projection as large as an egg had formed on the back, when the symptoms became acute and painful.—*Louisville Med. News.*

THE DANGERS OF OPERATING UPON HABITUAL DRINKERS.—Sir James Paget, in his recently published Clinical Lectures, says, "One does, indeed, sometimes meet with habitual drunkards who pass safely through the perils of great operations; but these are rare exceptions to the rule, according to which one may reckon that the risks of all operations increase with the increasing degrees of habitual intemperance. I think you will find that a habit of slight intemperance is much worse than occasional great excesses; that regular soaking is worse than irregular carousing; probably because of the steady impairment of the blood and of all the textures to which the soaking leads. Of course you will keep your hands off notorious drunkards, unless you are driven by the stress of strangulated hernia, or a stopped windpipe, or something leaving you as little choice as they do. But you must be on your guard to detect a good deal of drunkenness of the soaking kind, which is not notorious and not confessed. Be rather afraid of operating on those, of whatever class, who think they need stimulants before they work; who cannot dine till after wine and bitters; who always have sherry on the sideboard; or who are always sipping brandy-and-water; or are rather proud that, because they can eat so little, they must often take some wine. Many people who pass for highly respectable, and who mean no harm, are thus daily damaging their health, and making themselves unfit to bear any of the storms of life."—*Sanitary Journal.*

Vide Gross, Vol. II, page 202.

SUCCESSFUL RESTORATION FROM CHLOROFORM NARCOSIS BY NELATON'S METHOD.

BY EUGENE SMITH, M.D.

The patient was a girl seven years old, and after the operation (for strabismus) was finished, she suddenly ceased breathing, and "there was NO RADIAL OR CAROTID pulse." The patient was held up by the ankles, the head hanging down, and artificial respiration made, while she was held in that position. After three or four minutes "there was a feeble gasp—and after awhile another, and then another," and afterwards the breathing was restored. The breathing ceased a second time, shortly after laying her down, and a second restoration, similar to the first, was similarly effected. For the THIRD time she passed through the same terrible experience, in a few moments subsequently, and the same means restored her again, just as they were about to give her up, because this period was the longest of the three, and the doctor supposed the patient dead. The third restoration was followed immediately by vomiting, and complete consciousness quickly followed.—*Detroit Review of Medicine.*

ABDOMINAL SECTION FOR INTUSSUSCEPTION.

At a recent meeting of the Royal Medical and Chirurgical Society, three papers were read upon this operation. Mr. Howard Marsh related a successful operation, performed by himself on an infant seven months old, that had been complaining for thirteen days. The bowel was found projecting two inches beyond the anus, and the ileo-cæcal valve could be seen at the extremity of the protrusion, while in the abdomen a firm cylindrical tumor was felt. Insufflation, and the careful distension of the large intestine with lukewarm water, failed to reduce the intussusception. Abdominal section was then decided upon. Chloroform having been administered, the abdomen was opened to the extent of two inches in the median line, just below the umbilicus. It was impossible to reduce the intussusception by the introduction of two fingers into the abdomen, so the bowel was first withdrawn from the abdominal cavity, and then reduction was easily effected. At least one-half of the colon and an equal part of the small intestine were invaginated. The intestine was returned into the abdomen, and the wound closed with hare-lip pins and superficial sutures. No bad symptoms followed. Sickness ceased at once after the operation, flatus was passed on the second day, feculent matter on the third, and on the fourth the child was convalescent. Mr. Marsh thought that in this case the intestine was merely invaginated for thirteen days, and that inflammation set in twelve or fourteen hours before the operation. He concluded by referring to the necessity of undertaking the operation, if all other means had failed: first, in acute cases of not more than twelve or fourteen hours' duration; and, second, in chronic cases in which there had been no symptom of inflammation or strangulation of the intestine. The second case was under the care of Dr. Hilton Fagge and Mr. H. G. Howse. This case, an adult with intussusception, without symptons of strangulation, had inflation performed three times without success. Mr. Howse thereupon proceeded to open the abdomen by a vertical incision opposite the umbilicus. The intussuscepted mass was readily felt and drawn out of the wound. It was only by a kind of kneading movement with pressure upon the distal end, that reduction was effected. The length of the included bowel was eighteen inches. The patient recovered without a bad symptom, the wound healing by first intention. In this case, hemorrhage from the bowels was absent, and in their remarks the two gentlemen showed it was of great importance not to delay the operation till hemorrhage occurred. Mr. Hutchinson related a third and fatal case, where the same operation was performed upon an infant six months old, after the other methods of treatment had failed. The intussusception involved the whole length of the colon and the ileo-cæcal valve. Considerable difficulty was encountered in replacing the intestines within the abdomen. They were accordingly punctured with a hare-lip needle in two or three places. Death occurred six hours afterward, and the post-mortem examination showed evidences of recent extensive peritonitis. He was not inclined to consider the length of the incision as unimportant in the operation. There was no analogy with ovariotomy, where one had to deal with flaccid abdominal walls after removal of a large tumor. In intussusception, on the other hand, all the contents of the abdomen that were extruded had to be replaced, and this replacement was difficult, just in proportion to the length of the incision, and the amount of the prolapsed bowel. He had sometimes to reduce the size of the incision before he could replace the intestines. The present was the only case in which he had punctured the intestines, and which he hoped never to do again, attributing the fatal issue to this puncture. The general opinion in the discussion seems to have been, that the operation should only be reserved for those cases where all other means had failed.—*London Lancet.*

Dr. Mackintosh, one of the most popular city physicians, and a resident of Hamilton for over twenty years, died suddenly at his residence on March 23rd. He arose at his usual hour apparently in good health, and went about the ordinary duties of the day. At ten o'clock he expired, it is supposed in a fit of apoplexy.

PSORIASIS—TAR INTERNALLY.

I have come to regard tar in the light of one of the most valuable remedies we possess in the treatment of psoriasis. And it is not merely in mild cases that it does good, for it has, in my hands, frequently yielded the most satisfactory results in very obstinate cases after long courses of arsenic and many other orthodox remedies had been tried in vain. Perhaps it may be that the dose and mode of administration of the tar may have something to do with the difference of results obtained by Mr. Squire and myself; and, therefore, it may be well to state that I generally begin with two minims three times a day in a teaspoonful of treacle, and gradually increase the dose, if necessary, to half a teaspoonful, or even more. The small dose is advisable at first, as in some persons the medicine cannot be tolerated, and produces derangement of the digestive organs, fever, and a bright red rash upon the skin. I can testify also to the virtues of this remedy in catarrh of the bronchial tubes, as pointed out by Dr. Ringer, and in chronic affections of the mucous membranes generally; and I conclude with the remark that it is very singular how such a valuable remedy, which seems in earlier days to have been highly esteemed, should, as an internal medicine, have fallen into such disrepute in our own time.—Dr. T. M'Call Anderson, *British Medical Journal.*

A Remarkable Case of Aneurism.—On the 25th, inst., Mr. Oliver Pemberton, of Birmingham, tied the external iliac artery in a case presenting features of unusual occurrence and interest. The patient, a country gentleman of forty-seven, had led a life of great activity, especially in horse exercise; had been syphilitic, but was otherwise vigorous and healthy. Six months previously an aneurism formed in the left popliteal region; shortly after a second, at the apex of Scarpa's space; and when seen (Jan. 11th) by Mr. Pemberton there was a third under Poupart's ligament, all being in the same limb. The lower tumours were as large as the closed hand, and the upper the size of a goose-egg. The artery was secured about an inch from the bifurcation by an antiseptic ligature—which Professor Lister specially prepared by a new method which he has just devised, and which, as soon as he has perfected its details, he intends to bring before the notice of the profession. The immediate result of the operation was that all pulsation ceased in the three aneurisms, and has never returned (nine days having now elapsed). The patient is well, the pulse never having exceeded 84, and the wound without disturbance under antiseptic dressings. It need hardly be said that the all-important question here was, to what extent would the collateral circulation be established? How much of the limb could be preserved from gangrene? Let the position of affairs for a moment be reviewed. The main artery, extending from the seat of ligature below the bifurcation of the common iliac to a little above the origin of the anterior and posterior tibials, arrested, *at four distinct points*, by absolute barriers to circulation—*by one ligature* and three solid aneurisms! Despite these difficulties the existing conditions seem to assure the preservation of the limb to about the middle third of the leg, a marvellous instance of what collateral circulation can do when tried to its uttermost.

"A Senior Member" makes the following remarks in the *British Medical Journal* on the dispensing of medicines by surgeons:—"Either the principle of general practitioners dispensing their medicines is right or wrong. If right, why should it not be continued? or if wrong, let it be given up. The general practitioners of the present day are much more highly educated than their predecessors of even twenty or thirty years ago, and the tendency of the age in almost everything is division of labour; and the time, no doubt, will come, if we continue to increase and prosper as a nation as we have done during the last half century, when pharmacy and dispensing will be entirely relegated to chemists and druggists. Still, for a young man commencing practice as a general practitioner, it is a great mistake for him not to dispense his own medicines, which, with coated pills, and concentrated infusions, &c., can be easily done, and without much expense. Giving a prescription, and charging a fee of 2*s.* 6*d.* or 3*s.* 6*d.*, especially in chronic cases, is ruinous practice to a young general practitioner. By so doing, he plays into the hands of his patient and the druggist, who are the real gainers, whilst he and his wife and family, should he possess such blessings, may starve at home; and did not midwifery come to the rescue, many a young general practitioner must pay the penalty of such folly by going to the wall."

Midwifery.

CASE OF CÆSAREAN SECTION,

WITH SUCCESSFUL RESULT TO THE MOTHER.

By JOHN PARKS, M.R.C.S., London.

Cases requiring the Cæsarean operation to be performed are of such rare occurrence, and the favourable termination of such operations, as far as the mother is concerned, are so few in number, that I have no doubt the following particulars of a case. which has so terminated, will be interesting.

Mrs. H——, aged thirty-two, a worker in a bleach works, of a nervo-sanguine temperament, was in labor of her second child. She had had one previously, about seven years before, which was born prematurely, and was putrid. In this case she was in labor about two days, and made a very tedious recovery. She had been in labor about eight hours when I first saw her. On making an examination per vaginam, I discovered the right foot protruding. She had only slight pains at this time, but I was informed they had been severe before my arrival. Upon further examination, and endeavoring to seize the other foot, I found it impossible, as the antero-posterior diameter of the pelvis was so small I could not introduce my hand. The pains continued slightly without any change as to the advance of the child. Finding this to be the state of the case, and doubting the practicability of delivering the woman by any ordinary means, I called in the aid of my friend, Dr. A. Fletcher, who, after making a careful examination, came to the conclusion that the space was altogether too small for a full-sized child to be extracted. He also agreed with me, after carefully considering the case, that the only chance for the poor woman was delivery by the Cæsarean operation. I then called in Mr. Bott, who, together with his son, Dr. T. B. Bott, examined the case, and arrived at our opinion. This being the case, and as the patient was by no means exhausted, I determined to lose no time, but to proceed to operate at once.

The room being well warmed, the catheter having been passed, and the patient being placed on a table suitable for the operation, she was put well under the influence of chloroform. I commenced by making an incision in the linea alba, about seven inches in length, from just below the umbilicus to a little above the pubes, through the skin, adipose tissue, and fascia to the peritoneum. This having been reached, I made a small puncture through it at the upper part of the incision, and, passing the forefinger of my left hand through the opening thus made, I ran it so protected along the line of the incision from above downwards through the peritoneum. At the lower point of the incision the empty bladder was brought into view, and along the whole remaining length was the external surface of the uterus. There had been no hæmorrhage of any moment thus far. I next proceeded to make an incision along the surface of the uterus corresponding to the one through the parietes of the abdomen, and upon the first incision the hæmorrhage became brisk, evidently from the uterine sinuses having been opened. Great care was taken to prevent the escape of any blood into the peritoneal cavity. Having completed the incision through the uterus, the hæmorrhage abated somewhat. After breaking through the membranes the fœtus was brought into view, and I speedily extracted it, taking care to keep my hand in the uterine wound after the extraction of the fœtus in order to remove the placenta, which I did by detaching it from the fundus. Contraction of the uterus was now going on quickly, and great care had to be taken to keep the parietes of the abdomen in contact with it. This, however, was done; and during the whole operation no particle of intestine ever became visible. The child was unusually large, weighing 10½ lb., and was dead, as had been ascertained before the operation. When all oozing had subsided, I closed the uterine wound firmly by passing four silver-wire sutures through its entire substance, twisting the ends securely and cutting them off short. The contraction kept on at intervals, and it was satisfactory to observe that after the uterine wound had thus been secured, there was no discharge of blood from the uterus. The wound through the abdominal parieties I now drew together, and securely closed by six sutures of double silk (well waxed,) which I passed through the whole substance of the abdominal parietes. In the intervals between the sutures, long strips of adhesive plaster

were placed, above these a pad of dry lint, and to secure all a well applied many-tailed bandage completed the dressing. During the whole time she remained well under the influence of chloroform, and did so until she was comfortably placed in bed. Shortly after recovering consciousness she vomited, (no doubt from the effects of the chloroform). Small pieces of ice to suck and forty minims of tincture of opium were now administered. The operation was completed about eight p.m., and during the night small pieces of ice, together with forty minims of tincture of opium, were all that she took.

July 21st (first morning after the operation). Has slept about one hour during the night; there has been slight retching, but no vomiting; has taken ice freely; passed urine. Pulse 110; temperature 102 degrees. Complains of pain in abdomen like after pains. Ordered a grain of opium in a pill, to be taken every hour when in pain. There has been very slight oozing from lower point of external wound, also slight discharge per vaginam.

22nd.—Has had a restless night up to five a.m., with constant vomiting. Pulse 112; temperature 102 degrees. Skin moist; has a restless, anxious appearance; continues ice; passes urine freely; has taken some milk and soda-water, which has been retained by the stomach.—Evening: Seems easier; has had no return of vomiting since five a.m.; has slept several hours; passed water. Pulse 112; temperature 100 degrees. Tongue slightly coated, but moist; perspires freely; has had no shivering; has taken milk and soda-water, with a little brandy. Takes one grain of opium when in pain. I also gave her a hypodermic injection of one-third of a grain of morphia at the pit of stomach.

23rd.—Passed a comfortable night; no vomiting. Pulse 110; temperature 100 degrees. Continues milk, soda-water, and brandy; passes water freely; tongue slightly coated, but moist; discharge per vaginam continues slightly; very slight oozing from lowest point of external wound.—Evening: Has had more pain in abdomen, apparently from uterine contraction; very little tenderness on pressure over abdomen. Pulse 98; temperature 100 degrees. Continues milk, soda-water, and brandy; takes her opium pill when in pain; had another hypodermic injection to-night.

24th.—Had a good night; passing water freely; very little pain; no sickness or vomiting; had egg and milk with brandy, which was retained. Pulse 104; temperature 101 degrees; tongue moist.—Evening: Has had a comfortable day; no sickness. Pulse 100; temperature 102 degrees; tongue moist; passed water freely; skin acting nicely; breasts are just showing signs of secreting milk. Belladonna plasters applied to breasts, and the only medicine she takes is an occasional grain of opium; has taken three grains during the last twenty-four hours.

25th.—Had a good night. Pulse 90; temperature 100 degrees. No pain; discharge per vaginam continues slightly; tongue cleaning and moist.—Evening: Continues much the same; had bowels moved freely four times. Pulse 92; temperature 100 degrees. No pain; seems quite cheerful; has taken several eggs with milk; no sickness; had another hypodermic injection of one-third of a grain of morphia, and takes a grain of opium when in pain.

August 21st.—Sat up to-day for the first time. I have got her a strong abdominal belt, which supports her well. Wound healed with the exception of a very small bit at the lower part.

24th.—Went out to-day for the first time. From this time she continued to progress, and at the end of six weeks from the operation she menstruated, and has done so regularly since. She commenced her work in the bleach craft in the early part of October, and says she is now as strong or stronger than ever.

Since the operation, on inquiring into her previous history, I was informed that when she was a child she had been the subject of rachitis, and for four years was unable to walk without the aid of crutches. With this exception she had always previously enjoyed good health.

The points to be noted in this case, and which no doubt contributed very materially to the happy result, are the following: 1. The woman was of a good sound constitution. 2. The operation was performed before the powers of nature were greatly exhausted. 3. The great care that was taken to keep the abdominal parieties in contact with the uterus during the whole of the opera-

tion, thus preventing the exposure of the intestines. 4. The complete closure of the uterus so as to prevent the escape of any discharge into the peritoneal cavity. 5. The keeping the patient constantly under the influence of opium. —*London Lancet.*

IRRITABILITY OF THE FEMALE BLADDER OF FIFTEEN YEARS' STANDING CURED BY DILATATION OF THE URETHRA AND NECK OF THE BLADDER.

Mr. H. B. Hewetson observes:—The notes of this case are of extreme importance in connection with an operation, still on its trial, introduced by Mr. Pridgin Teale, and but recently published, which comprises dilatation of the urethra in the female for the relief of irritability of the bladder, and, as in this case, occasional retention of urine. The absolute success attendant upon its performance in some cases, and its partial, if not complete, failure in others, render it incumbent that strict records of the symptoms, general as well as local, which affect females, the subjects of irritable bladder upon whom this operation is performed, should be kept. The extent to which the dilatation of the urethra is carried should especially be noted, since the partial or complete failures may possibly be the result of too cautious stretching from fear of producing incontinence of urine. Moreover, the general symptoms must be taken into account, for it may be that it is upon them the surgeon is consulted, without the slightest reference being made (as this case will show) to the more delicate point of irritability of the bladder; when it is upon the latter trouble that the general malaise depends.

The following are the notes of the case:—Miss M——, aged thirty-six, sent for Mr. Hewetson on the night of March 3rd, 1875. On arrival at her home, he found her to be suffering intensely from retention of urine. He relieved her (by the use of the catheter) of a large quantity of urine—such an amount as must have distended the bladder nearly if not quite up to the umbilicus. This point he did not test, being anxious to relieve her without delay from the worst agony of retention. The retention returned in a day or two, and he had again recourse to the use of the catheter.

Her previous history is as follows:—That she was a perfectly strong and robust woman, following the *arduous* duties of a "present day" schoolmistress until fifteen years ago, when she was seized with an inflammation of the bladder, for such it was termed by her medical attendant. This was followed by the formation of a small abscess in the region of the urethra, which discharged of itself. Since that time her health had been bad, her nights had been wakeful and disturbed by being constantly "every half hour or hour" obliged to get up to pass small quantities of urine with great effort and some pain. She is low and depressed, with headache, loss of appetite, and continual bearing down, resulting in a total unfitness for prolonged exertion of any kind. She has lost flesh considerably.

On examination Mr. Hewetson found the orifice of urethra to be completely surrounded by warty growths of considerable size, and on examining the rectum the introduction of the finger was impeded by a very tight sphincter ani. The rectum was baggy, and there was a small external pile. The uterus was in its natural position, and the catamenia were and had always been, regular, and the urine was natural. Not being able to estimate to what extent the retention was due to the warty growths, and seeing she was suffering considerably from rectal difficulties, he deemed it advisable to negative the possibility of the retention being caused by the warty growths by removing them, and whilst the patient was under the influence of an anæsthetic stretching the sphincter ani with the forefingers introduced back to back sufficiently forcibly to paralyse it for a time and allow the sore produced by the snipping off of the pile to heal in the same way as one could cure a fissure of the anus, by setting the spasm of the sphincter ani at rest, which constantly contracting, might possibly be an element, through reflex action, in helping to keep up the vesical irritability.

Accordingly, on March 5th, chloroform having been administered, Mr. Hewetson completely carried out the above suggestions. The result of this was, that during the next few

weeks relief was given to the retention of urine and to the pain in passing the motions; but there was no relief at all from the vesical irritability. Her general condition, with these exceptions, continued as before, and there was a return of the retention of urine at the end of three weeks from the operation.

Mr. Hewetson had told her a second operation would possibly be necessary should the first fail to give relief, and accordingly, on April 11th, he again placed her under the influence of chloroform, and introducing Weiss's female dilator into the urethra to the extent of about two inches, he then *slowly* separated the blades of the dilator, stretching the urethra so as to admit of the introduction of the forefingers within the bladder while the parts were on the stretch. On closing the blades and withdrawing the instrument, the urethra contracted upon the little finger, so as sensibly to grip it when introduced into the bladder, the coats of which were thickened. There was no foreign body or stone to be detected.

She was very much upset by the chloroform-sickness, which continued more or less all night; there was, however, *no more irritability of the bladder, no retention, no incontinence produced*, and, to use her own words, "I have not passed water so freely for years;" nor had she retained it so long without being disturbed; for the first time she made water was in the evening after the operation, and she was not disturbed during the whole night.

April 14th.—She slept the night through, and awoke with little or no headache, retaining and passing her water quite naturally with the exception of some soreness.

Her progress now continued to be satisfactory and very rapid.

May 4th.—She reports her old symptoms to have all disappeared. She sleeps and eats well, and takes a fair amount of exercise.

At this stage Mr. Hewetson ordered her into the country, where she resides, and returning on May 31st, she reported herself as perfectly well, and as having gained three stones in weight. On the day previously she had walked a distance of eight miles without feeling more than ordinary fatigue, and remarked that before the operation "she could hardly trail herself about."

Thus, then, were the miserable and intractable sufferings of years, shutting out this poor woman alike from society and employment, put an end to at once by an operation whose best recommendation is its simplicity and its success. —*Lancet*, Dec. 1875.

EMBOLISM OF THE PULMONARY ARTERIES FOLLOWING THE USE OF ESMARCH'S ELASTIC BANDAGES TO THE LOWER EXTREMITIES.

Dr. J. V. Massari reports at length the following case, which occurred at the clinique of Prof. J. Spaeth: A woman, 33 years of age, and in the sixth month of her eleventh pregnancy, was brought in suffering from hemorrhages, which were soon ascertained to be due to placenta prævia. Labor was artificially induced, the placenta separated and the fœtus delivered in the afternoon. After the operation the patient fell into a condition of collapse, with fainting fits, and difficulty of breathing. An elastic bandage was therefore applied from the toes to the upper third of the thighs of both extremities, with the effect of relieving the urgent symptoms of exhaustion. Stimulants, beef extract, etc., were given, and there was no further hemorrhage. During the evening she complained so much of the pain of the bandages, that they were taken off, but had to be replaced on account of the threatening symptoms of pulmonary and cerebral anæmia. The next morning they were once more removed, and again replaced at once for the same reasons. During that day her condition somewhat improved, but at 11 o'clock at night, as she could not sleep from the pain of the bandages, that on the left leg was carefully loosened. At once her face became pale, in her wrists the pulse was lost, there was dizziness, panting for breath, and great complaint of pain and palpitation about the heart. After various remedies, including compression of the abdominal aorta, and restoration of the bandage, had been used, the pulse became perceptible again; but the bad cardiac and respiratory symptoms constantly increased, and she died after two hours. The autopsy

was made thirty hours post-mortem. In the pulmonary arteries of the third class on both sides several clots from 3 to 4 mm. thick were found. The saphenous veins also and their radicles, in both thighs, were found dilated, convoluted, and filled with small partially adherent clots, strikingly resembling those found in the lungs. The author's conclusion is that this thrombosis of the pulmonary arteries, which caused death, doubtless took place when the bandage was taken off the left leg; that the clots came from the region of the saphenous veins, and their formation there was favored by their varicose condition, and the long retention of the bandages *in situ*, being respectively seven and thirteen hours consecutively. The patient also showed an unusually low degree of recuperative energy. We should therefore be very cautious in the use of the elastic bandages where there are any varicose veins, because of the difficulty of completely emptying them as it is applied, and because blood so retained favors the formation of finer clots. The author refers to a similar accident reported by Prof. Kundrat, where flannel bandages had been used over varicose veins.—*Wiener Med. Woch.*, Nov. 27, 1875.

Ulceration of Cervix Uteri—Nitric Acid.

Nitric acid, as a caustic in uterine practice, is preferable to nitrate of silver and to potassa fusa. Nitric acid is a really efficient caustic, producing a slough, which is peculiarly firmly adherent, and which consequently necessitates a healthy effort by the subjacent parts for its separation. The only other caustic which produces a slough of the same character, is nitrate of mercury. Nitric acid moreover requires no special preparation; it does not spread like potassa c. calce, nor is its action so deep; it produces little or no pain and no hemorrhage. These advantages are trivial compared with the fact, that when once it has been properly applied, in many cases no further interference is necessary, and thus the frequent use of the speculum may be done away with. The acid is best applied by means of a small and tightly rolled piece of cotton-wool, which is to be placed by an ordinary speculum forceps in contact with successive portions of the surface until the whole is covered with a white eschar. In a case of chronic endocervicitis, the acid should be applied to the interior of the open cervical canal, and if it is not open the case is not one suitable for the treatment. The contraction which accompanies healing is only to a healthy and natural degree. Provided the caustic has been used with ordinary prudence, I have never seen anything but good follow its use, and the ease with which a chronic case of catarrh, with ulceration or erosion, may be cured by it is something marvellous.—Dr. James Braithwaite.

INDUCED LACTATION.

BY R. D. GILBERT, M.D.

Mrs. ——, of this city, a married lady, but having no children, took an orphan child three weeks old to raise. She began feeding the infant on cow's milk, tea and crackers, etc., and, as is usually the case, the child soon got sick, and thus I was called in to prescribe. We found it with a slight diarrhœa, and somewhat emaciated, and continually crying; indeed the crying was almost incessant, which was quieted only by repeated doses of paregoric Our prognosis was of course unfavourable, for statistics show that three fourths of the "spoon-fed" children die before completing the first year. Therefore the plan of treatment for our case was to procure the natural food—that is, a wet nurse; for we attributed the crying and diarrhœa to two causes—viz., loss of its mother and the character of the food; and thus to furnish a wet nurse would meet both indications. After diligent search a wet nurse could not be found. We then recommended the "next best thing," and that was for Mrs. —— to suckle the baby herself! She was shocked at the suggestion at first; but after assuring her that I thought it could be done, and citing other similar cases as reported by Dr. Gilfillan of Brooklyn, and remarking upon her great love for the infant and its dependence upon her for life, she came to look upon it as a Christian duty to nurse the child and suckle it if possible. Moreover, she was anxious to become a mother, but had despaired of becoming one naturally, hav-

ing been married five years ; she the more readily undertook the experiment. We allude to these matters because we consider the mental influence of greatest importance in the secretion of milk, and think our treatment very favourably influenced by having cultivated a *desire* in that direction.

We directed her on retiring at night not to give the accustomed opiate, but let it take hold of the breasts, which were well developed. The child took hold with avidity, and after sucking nearly an hour at the dry breast it went to sleep and slept nearly all night. The following day we caused a large poultice of the green leaves of the *ricinis communis* (castor-oil plant) to be applied, and at the same time giving teaspoonful doses of castor oil internally every three hours. At the end of the first twenty-four hours she experienced a peculiar sensation in the breasts, and in three days the flow of milk was well established. It is needless to add that the infant speedily recovered, and the adopted mother experienced great satisfaction.—*Louisville Med. News.*

TREATMENT OF UTERINE FIBROIDS BY ERGOT.

Through the kindness of Dr. Byford, of Chicago, we have received a copy of his address in Obstetrics, before the American Medical Association, at its meeting last summer ; and as the subject is one of very great practical importance and value, we take the liberty of publishing his general conclusions, for the benefit of our readers.

GENERAL CONCLUSIONS.

The fibrous tumor of the uterus may be affected by ergot in three ways :—

1. It may be gradually disintegrated and absorbed, In this way it disappears without any violent or disagreeable symptoms.

2. Its nutrition may be so interrupted as to produce a rapid destruction of its vitality ; thus, decomposition may occur within the capsule, and a semi-putrid mass be expelled a little later. This process is accompanied with evidences of inflammation of the uterus, and toxæmia more or less grave, according to the size of the tumor, the length of time between the commencement of decomposition and the expulsion of the tumor, and the vital resistance of the patient.

3. The tumor, inclosed in its capsule, may be totally or partially expelled from the cavity of the uterus, attended with a greater or less degree of inversion of the organ. In this condition it becomes amenable to surgical process for completing its removal.

When these tumors disappear in the manner first mentioned, no evil consequences to the patient are experienced, but grave and even fatal effects are likely to arise during their gangrenous disintegration within the uterine tissues. Even when the tumor is small, great suffering and peril to the patient supervene, and when large it is pretty certainly disastrous. I have not been so unfortunate as to witness fatal consequences from the effects of ergot, but I have seen the overwhelming results of gangrenous disintegration of large fibrous tumors arising from other causes. In the case of a large tumor now under treatment, I was upon one occasion forcibly reminded of what might happen by the violent and prolonged contractions of the uterus, brought about by large doses of ergot. Very dangerous symptoms of inflammation were excited in this case.

Ergot is not always immediately, or even soon, followed by contraction of the uterine fibres. Its effects are in certain cases cumulative ; hence its steady adminstration for a length of time may be followed by extremely violent and prolonged action when it does occur. In the case above referred to, its effects were not observed until the patient had taken the medicine for two months ; then with explosive suddenness the patient was attacked with terrific uterine contractions, which did not subside under the use of opium and chloral until the fifth day. The patient took the fluid extract internally. This effect should be regarded as possible in all cases where the patient appears to resist the influence for several weeks, and when the tumor is large we should be cautious to avoid, and prompt to counteract, such consequences by appropriate means.

The violent action of ergot may also be brought about somewhat suddenly by increasing the quantity beyond a moderate amount.

From a review of the cases it will be seen

that the gradual disappearance of the tumor takes place under doses too small to cause the violent action here referred to. Dr. Hildebrandt administered hypodermic injections containing what was equivalent to fifteen or twenty grains of crude ergot once a day or every second day. Dr. Dean's treatment proved to be sufficient, although the amount was not greater than Hildebrandt's, and was administered but once a week.

Our opportunities for observation have been too limited to enable us to arrive at accuracy of detail in the use of ergot for the cure of fibrous tumors of the uterus. I think, however, we are warranted in saying that moderate doses of ergot, say half-drachm doses of the fluid extract twice or three times a day given internally, or five grains of the solid extract once a day hypodermically persistently used, is generally sufficient when we wish to cause a gradual disappearance of the tumor, and that this quantity should not be exceeded in the treatment of large multinuclear tumors. When, however, we desire to cause the expulsion or gangrenous disintegration of a tumor, it is necessary to give much larger quantities and persevere until it produces the violent action necessary for such effects.

I conclude my address with the cautionary observation that ergot, in the treatment of fibrous tumors of the uterus, is a prompt and very powerful agent, which cannot be recklessly used without great danger; and that much careful observation is still necessary to enable us to determine the circumstances under which its adminstration will be both safe and effective.

Compression of the Aorta in Profuse Post-partum Hemorrhage.—Dr. Leon Gros, from numerous and conclusive observations maintains that compression of the aorta is a most effectual means for promptly arresting profuse post-partum hemorrhages, and may often preserve from certain death. This compression should be sometimes continued for hours and assisted by the administration of ergot. Besides promptly arresting the hemorrhage, the compression has a decided influence when the hemorrhage has been already profuse, by maintaining in the brain and heart sufficient blood to re-establish the functions of these essential organs.—*L'Union Méd.*, Sept. 14, from *Bull. de Thérap.*, 1875.

Materia Medica.

PROPRIETARY MEDICINES.

For some months past the pharmaceutical journals have been loudly proclaiming the anticipated virtues of a *Popular Health Almanac*, which, by exposure of their composition, is intended to upset the trade in proprietary medicines. It is is edited by Dr. Hoffman, of New York. The following results of analysis are given in it. Of course we do not guarantee the correctness of the formulæ.

Mrs. Winslow's Soothing Syrup comes in vials containing $1\frac{3}{4}$ fluid ounce; it consists of sugar syrup strongly flavoured with an alcoholic tincture of fennel, anise, and a little caraway-seed, or an alcoholic solution of their essential oils, and with or without an admixture of solution of sulphate of morphine in varying quantity. While recently it has been found not always to contain morphine, at times as much as one-half of a grain and more has been found in each fluid ounce of the syrup, as often reported in the course of years in medical and pharmacuetical journals.

Godfrey's Cordial is a mixture of dilute alcohol sweetened with molasses, scented with oil of sassafras and with an addition of a small amount of carbonate of potash, and about 15 drops of tincture of opium to each fluid ounce.—*United States Dispensatory.*

Walker's California Vegetable Vinegar Bitters.—Each bottle contains 19 to 20 fluid ounces, consisting of a decoction of aloes and a small quantity of gum guiacum, aniseed, and sassafras bark, in water slightly acidulated with acetic acid, or by subsequent fermentation, or by the use or addition of sour cider; to this are added about 1 ounce of sulphate of soda, $\frac{1}{4}$ ounce of gum arabic, and $\frac{1}{2}$ to 1 fluid ounce of alcohol.—*Eberbach, Hoffmann, Nichols.*

Hooper's Female Pills.—Each box contains 36 to 40 black pills, weighing 40 grains, and consisting of 4 parts by weight of aloes, 2 parts of crystallised sulphate of iron, 1 part of myrrh, 2 parts of extract of black hellebore, 1 part white Castile soap, and $\frac{1}{2}$ part white canella.—*United States Dispensatory.*

RADWAY'S READY RELIEF.—2½ fluid ounces of a light brown liquid consisting of 2 ounces of soap liniment, 2 drachms of alcoholic tincture of Spanish pepper, and 2 drachms of strong aqua ammonia (heartshorn).—*Hager, Peckolt, Hoffmann.*

PIERCE'S GOLDEN MEDICAL DISCOVERY.—7 fluid ounces of a dark brown liquid consisting of a solution of 1 drachm extract of lettuce, 1 ounce of honey, ½ drachm tincture of opium in 3 ounces of dilute alcohol, and 3 ounces of water.—*Hager.*

PIERCE'S FAVOURITE PRESCRIPTION.—10 fluid ounces of a greenish-brown turbid liquid consisting of a solution of ½ ounce of sugar, and 1 drachm of gum arabic in 8 ounces of decoction made from 2 drachms of savine, 2 drachms of white agaric, 1¼ drachms of cinnamon, and 2 drachms of Chichona bark; to this mixture are added ½ drachm of tincture of opium, and ½ drachm of tincture of fox-glove, and a solution of 8 drops of oil of ainseed in 1½ ounce of alcohol.—*Hager.*

CHLORAL.—By J. S. Unzicker, M.D.—(Communicated to *Cincinnati Lancet and Observer*, March, 1876.) "Chloral at the present time is not quite the same as that first introduced. Since it became easier to make the hydrate than the alcoholate of Chloral (at first used) the latter, and all mixtures of it, has practically disappeared from the market, without any probability of its ever re-appearing. When chloral first came into use, from ten to fifteen grains were generally found sufficient to produce quiet and refreshing sleep; but no sooner had it become a fashionable remedy, than thirty to sixty grains were considered a dose. Much mischief, as is well known, was frequently the consequence, and many cases of fatal termination, by overtaxing the system by large doses of chloral were reported. Dr. E. R. Squibb, the only manufacturer of a pure article of chloral at present in this country, says in his excellent paper on the subject: 'Chloral supplies another forcible illustration of the baneful effects of speculation and inflation, and of the danger which must always attend popularity, and particularly attend the popularity of potent medical agents. It seems hard to teach the public that nothing can be potent only for good; that to be potent (only) for good involves in the very nature of all things, an even potency for harm.' Hence the danger, that the most valuable remedies, when used empirically or indiscriminately, must fail to become 'cure all,' are unjustly thrown aside and forgotten by those who employ them with the expectation of producing sleep, even in the most unsuitable cases. Many are in the habit of combining chloral and potassium bromide, and then expect the effect of each combined. What the effect of this mixture may be is hard to tell, from the chemical changes that must naturally take place. Alkalies, either in the form of solid hydrate or of aqueous solutions, decompose chloral readily at ordinary temperatures, with evolution of heat, converting it into formate of potassium and chloroform, and a portion of the latter compound is further decomposed, yielding formate and chloride of potassium."

RESIN OF COPAIBA IN ASCITES.—Dr. Samuel Wilkes has tried this remedy for two years past, as a diuretic, and considers it of great value. The old objection to the use of copaiba is entirely done away with by using the simple resin after the nauseous oil is removed. In cardiac and hepatic dropsy its efficacy is undoubted, more especially in the former case. In a case mentioned, after digitalis, squill, and mercury had ceased to be effectual, the copaiba taken in doses of fifteen grains (made into pills), three times daily, removed all dropsical fluid in a few days. The excellent property of this drug is, that if it acts on the kidney at all, it acts at once. If the first or second dose does not display its diuretic effect, there is no use in persisting in it.—*British Medical Journal*, December 25, 1875.

SEVEN SPRINGS MASS.—Our attention was called to this "mass" by the remarks of Dr. W. F. Barr, of Abingdon, published in the Transactions of the late session of the Medical Society of Virginia. The proprietors kindly sent us an ample quantity for testing purposes, and since the exhaustion of that supply we have prescribed it on several occasions. These repeated trials of the mass enable us to endorse the fact that it is a very valuable alternative, ferruginous tonic.—*Virginia Medical Monthly.*

TREATMENT OF BURNS.—In the treatment of burns, when of a superficial character, a preparation consisting of two parts of collodion and one of olive-oil has been found to be very efficacious. When the burn is of an extensive character, gasoline proves of decided benefit. The advantage of gasoline is, that it is of the right consistence, and does not become rancid.

Translations.

THE CURE OF INSANITY BY MORPHIA.

BY DR. VOISIN.

(Translated from a review in the Paris *Médical.*)

Almost all the varieties of insanity improve under the morphine treatment, and there are few which have not resulted in cure. But that which gives the most satisfactory result is *melancholic insanity with hallucinations.* One might say, in reading the observations published by M. Voisin, that muriate of morphia is a specific against hallucinations. The reader will perhaps think that the treatment has been lengthy; but we will draw his attention to the fact that the question is principally of affections [generally considered] incurable, and that the morphine treatment deserves a good deal of consideration, as well on account of this specific property as for the facility of its administration in the form of subcutaneous infection.

(The histories of fifteen cases are here recorded. In all the patients were females, their ages ranging from sixteen to sixty-three years. All recovered; in several cases the recovery is reported as being permanent as far as was known—no cases are recorded as having relapsed. One case was cured in twelve days, one in three weeks, one in six weeks, three in three months, one in three months and a half, two in four months, one in five months, one in six months, one in seven months, two in eight months, one in ten months. The smallest dose commenced with was three milligrames, about one twentieth of a grain, the largest dose reached was thirty-nine centigrammes—about six grains. The injection was usually given twice daily, morning and evening, the dose being gradually increased until improvement was evident, and then gradually decreased until recovery took place. In some cases the dose never exceeded half a grain.)

It is to be remarked that the patients absorbed considerable quantities of morphia muriate, without, in certain cases, any physiological effect being met with. One case is extremely remarkable in this connection. They injected into her more than 818 grains in a month, from June 22nd to July 22nd. This tolerance of the drug is exceptional; however, patients afflicted with insanity and other neuroses sometimes bear with impunity enormous doses of narcotics. The practitioner must approach the large doses gradually. In reading the histories of the cases one sees that the treatment is (generally) pretty long. It is with a few milligrammes that one commences, increasing the dose slowly and gradually till well-marked improvement in the mental condition is manifested. It is then diminished till a dose of a few milligrammes is again reached, and the treatment is not stopped till after the symptoms have disappeared.

In the most of the cases where the patients offer great resistance to the action, even physiological, of the morphia, one will find a great deterioration of the general condition; in these cases M. Voisin employs transfusion to improve this. The morphia treatment afterwards acts with greater efficacy.

Under certain circumstances a complete intolerance of the drug is remarked, manifesting itself by frequent vomitings, loss of appetite, heaviness, wasting. M. Voisin sees in this intolerance an indication that the disease is of a congestive form, and in these cases it is necessary to precede the morphine treatment with anti-congestive treatment.

If this congestive condition of the brain could be diagnosed beforehand, it would be a contra-indication to the administration of opiates.

Symptoms of Pregnancy in very Young Girls.

We owe to one of our French exchanges the following *résumé* of a paper published in *Annales de Gynécologie* by M. G. Bergeron, associate Professor in the Faculté de Médecine, &c., Paris:—

When a very young girl, in whom the catamenia have only recently made their appearance, is subjected to the approaches of a man, it may happen that the courses may cease for some months, that the breasts swell, that the most characteristic symptoms of pregnancy show themselves.

Three cases are reported, in all of which the breasts were much enlarged, the areolæ dark, and the abdomen much swollen, and in one there was a well-marked brown line. One of the others said she had felt movements for three weeks before she was examined. The ballottement and auscultatory signs gave negative evidence. One had nausea. In all the courses re-appeared in from six to nine months.

Formulæ of M. Gueneau de Mussy for the Hæmoptysis and Vomiting of Consumptives.

For hæmoptysis :

Ext. Krameriæ	3i.
Secale Cornut.	gr. xlvi.
Pulv. Digitalis.	gr. vii. ss.
Ext. Hyos.	gr. iii. ss.

Divide into 20 pills : 4 to 6 in twenty-four hours. The krameria and ergot are given as hæmostatics, the digitalis to lower the circulation, and the hyosciamus for the cough,

For vomiting caused by fits of coughing :

Ext. Belladon.	gr. iii. ss.
Ext. Cinchon.	3ss.
Div. in pil.	xx.

The following plaster may also be applied with benefit to the epigastrium :

Emplast. Diachylon.	
Theriacæ.	aa. partes ii.
Ext. Belladon.	partem i.

—*Paris Medical.*

New Mode of Division of the Infra-orbital nerve for Obstinate Neuralgia.

(*From the Lyon Medical,*)

In a case of obstinate neuralgia Dr. Letievant operated for its relief by cutting down on the anterior edge of the floor of the orbit, breaking open the superior wall of the infra-orbital canal, raising the nerve, separating it from the artery and excising a piece nearly four lines in length.

On the Action of the Alkalies on the Glucose of Diabetic Patients.

In the *Progrès Médical* we find an article on the above subject. The Editor considers the beneficial effects of alkaline mineral waters,—especial reference being made to Vichy,—to be a well established fact ; and he proceeds to consider the *modus operandi.* After referring to physiological experiments by Poggiole, Lehmann, Claude Bernard, Pavy and others, he draws the following conclusions :—

1. The Alkalies have no action on the glucose already formed.

2. They interfere in the production of urinary glucose by diminishing the sugar-making power of diastatic liquids, and consequently, by hindering the introduction of an excess of sugar into the blood.

3. The bicarbonate of soda acts not only on the salivary diastase, but also on the pancreatic juice.

4. In the last connection its action is far more apparent on the pancreas of omnivorous than on that of herbivorous animals.

Extraction of a Living Insect from the Ear.

—The *Archives Médicales belges* relate the following case : A little girl three years old put an insect, "*bête à bon Dieu,*" into her ear. Sharp cries, agitation, convulsive symptoms ensued ; injections of water were made without result. The physician then conceived the idea of asphyxiating the insect by means of chloroform ; he dropped four drops of chloroform upon a small piece of cotton which he introduced into the ear. Immediately the child ceased crying and complained no further of any disagreeable sensation ; the insect had become asphyxiated ; an injection of warm water brought it away dead, and no further trouble ensued.—*Paris Médical,* Feb. 20 1876.

Dog's Milk for Children.

—Dr. P. Luzun (*Bordeaux Medical,* No. 43, and *Gazette Hebdom.*, November 5, 1875) relates the particulars of three cases in which he employed dog's milk. In the first, a girl between six and seven years old, affected with rickets, who was unable to walk. Within twenty-five days she became vigorous and able to walk. He states that dog's milk contains as much again of butter as human milk or that of the cow, and seven or eight times more than that of the donkey. It is also of all milks which are employed by man, save that of the sow, the richest in casein.

THE CANADIAN
Journal of Medical Science,
A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, APRIL, 1876.

UNIVERSITY REFORM.

The spirit of *unrest* was never more apparent on the surface of human society than at the present time. There is scarcely an institution, either civil or religious, which is not being disturbed by an agitation for reform or change. In many instances, as in the case of the merchants' shipping, the agitation came none too soon, and it is likely a Plimsoll could find many objects in this country to call forth the energies of his warm-hearted philantropy; but the desire for change or reform is not limited to the institutions of commerce, it extends to the various departments of the Christian Church, and even to our oldest and most cherished colleges and universities. From nearly all parts of the British Empire, we hear calls for University reform, even in regard to institutions supposed to have been founded on the most firm and reliable basis. We are not believers in the absolute perfection of human judgment, and therefore do not wonder, that as time rolls on it should be found necessary to make certain changes in our schools, colleges and universities, by which they will be better adapted to the requirements of modern society. Our universities, the admiration and ambition of so many, are very apt, as they grow old, to become so encumbered by traditions and customs of the past, as to lessen the full measure of their usefulness in advancing years, and to call for the active intervention of the pruning knife to adapt them to the wants of the on-coming ages. It is no wonder, therefore, if the Toronto University, and University College, hitherto the pride and glory of Canadians, should come in for a share of the attentions of the reforming spirit of the time. There are some who feel inclined to blame the University because its degrees and honors have not been more largely taken by the people; but we think it has acted wisely in looking more to the attainments, than to the number of its graduates. The University and College have, in our mind, always occupied rather an anamalous position, and should not be held altogether responsible for results arising from the peculiarities of their position. When the Institution was emasculated in 1852, by the removal of the faculties of law and medicine, it was rendered incapable of competing, on equal terms, in regard to numbers, with other Universities, retaining all their faculties.

The University of Toronto is now a graduating body only, and has to depend for its candidates chiefly upon University College, the teaching department; but as the College only consists of the faculty of Arts, it is manifestly impossible that University College can number as many students per annum as other teaching colleges with all the faculties, of Arts, Law, Medicine, and Divinity, in full operation, and the graduating class of the University of Toronto must fluctuate *pari passu* with the absence of its faculties.

At the same time, a system of prizes and scholarships was instituted, with the view of assisting meritorious talent; but oddly enough, these rewards were all equally available to the students of competing colleges, still exercising their graduating functions and examining their own students; while the students of University College were always liable to be examined by strangers, an arrangement which, no doubt, did tend to make the Degrees of the Provincial University highly respected wheresoever the English language is spoken; but which, undoubtedly, had the effect of keeping down the numbers attending the College, or graduating at the University, to a point not commensurate with the expectations of the public. It was thought, that by the system of affiliated schools, the absence of the usual Faculties in the College would be compensated for; but it has been found the reverse; for while some did send their students to the College for certain lectures, and to the University for their degrees, yet, in many

instances, the affiliation was only availed of, to enable their students to compete for the rewards of the University, while a large proportion of the students of the affiliated schools preferred to spend the last two years where they could be examined by their own teachers. That it will be for the advantage of the University or the country to divide the Arts degree, in the way proposed by some, we very much doubt; but we are of opinion that, in view of the facilities afforded by our admirable system of High Schools throughout the country, the entrance or matriculation examinations might be very considerably raised in all the branches, and perhaps increased by the addition of Botany and some other subjects, in such a way as to enable the lecturers to devote their time to the higher departments of their several subjects, instead of having to first take their class over those rudiments which ought to have been mastered before entering the College. If there are weak places in the present teaching staff, of which we are not aware, let them be strengthened; but let vacancies be filled by men who have a warm sympathy with, and a clear knowledge of the wants of Canadian students, if they can be found among ourselves qualified for the positions.

We think it is not so much on account of deficiencies in the teaching staff, or defects in the curriculum, that the University and College have come short, as on account of an inherent weakness in their Constitution, and that weakness we have tried to point out.

THE death is announced of Sir Duncan Gibb, Bart., aged 55. The deceased was educated for the medical profession, first at St. Bartholomew's Hospital, London, and afterwards at Montreal, in Canada. He graduated M.D. at McGill College, Montreal, in 1846. He was also a member of the Royal College of Physicians, London, and was for some time physician to the Westminster Hospital, and to the West London Hospital. He was a member of many societies in Europe and America, and the author of several works on the diseases of the throat and windpipe.

TALIPES VARUS.

We have been shown a very neat and useful shoe for keeping the foot in its normal position during early infancy, and after division of the tendons in older children. A gentleman in Brampton, whose child was operated on by Dr. Moore for double *talipes varus*, found that if the usual surgical instrument and boot were worn both night and day the feet did not grow, but remained in a rudimentary state; while if the instrument was left off during the night the projecting bones resumed their abnormal positions, and the gain of the day was lost at night. He therefore contrived a boot which could be worn at night without confining the toes, but with sufficient firmness to keep the foot in whatever position the instrument had brought it during the day, and the result has been eminently satisfactory.

The boot being small, smooth and light, does not interfere in the least with the child's rest, and it is so firm that the patient can walk upon it in the morning with perfect ease and safety, without having to wait for the application of the larger instrument by an older person; whereas throwing the weight of the body on the *unsupported* foot always restored the original distortion. The boot is made altogether of firm sole-leather. The sole of the shoe is the full length and exact size of the sole of the foot, the upper is made high enough to reach well above the ankles, moulded to a last the exact size and *shape* of the foot when brought as nearly as possible into its normal position, and then firmly stitched to the sole, which is also moulded to the last. The upper only reaches forward enough to cover the ball of the great toe, while all the other toes are left free and exposed. The shoe is laced up the front, and when completed, forms a perfectly unyielding case which stands square on its bottom and rigidly maintains during the night all that has been gained during the day. The toes being exposed, have a tendency to spread outwards in the natural direction whenever the child throws its weight upon the foot, and the foot grows more rapidly. Being unpatented and only costing fifty cents, it is quite within reach of the poor, and will probably, when applied early, supersede, in many cases, more expensive instruments.

ELECTIONS TO THE SENATE OF TORONTO UNIVERSITY.

We observe that the Hon. Edward Blake, M.A., L. McFarlane, M.B., and T. W. Taylor, M.A., are the retiring members for this year, all of whom are eligible for re-election, and that the election of members to supply their places will take place early in May. As there is likely to be some modification in the curriculum and general management of the University before long, it is very important that the Convocation should select men who have the interests of the University at heart and who know the wants of the country as well.

From our personal knowledge of Dr. McFarlane and Mr. Taylor, we know that better men could not be selected to fill their places, as they are both fully alive to the requirements of the situation, both are true to their *Alma Mater* and in their allegiance to *legitimate medicine*, and we hope to see them both returned as they belong to the class of working members. If it be true that Mr. Blake is about to be elevated to the Chancellorship, we hope the graduates in arts and medicine will be able to unite on a successor to him, who will not only be willing to devote the necessary time to the trust, but who will be thoroughly true to the University and to the medical profession, from which the University has derived such timely aid, at a period when its friends were comparatively few. Of course if another *medical graduate* could be chosen to fill the vacant post we should be pleased, but if that is not deemed possible or expedient, we hope Convocation will see that the new representative shall be as true to legitimate medicine as the proposed Chancellor is known to be.

THE authorities of the Medical Department of the University of Louisville, upon the 9th day of February decided to abolish hereafter the requirement of theses from candidates for graduation. We believe this is the first institution which has taken this step, the propriety of which must be apparent to all. Why the fearful and useless bore should have been kept up so long is inexplicable. We understand that one of the other colleges of this city will also abolish this unnecessary exercise, and we doubt not the centennial year will see it pretty well swept out of existence everywhere in this country.—*Louisville Medical News.*

Communications.

TRICHINA SPIRALIS.*

BY WM. OSLER, M.D.,

Prof. Institute Med. McGill College, Montreal.

Of all nematode parasites the trichina spiralis is the most directly inimical to man, frequently causing wide-spread and fatal epidemics. This parasite was discovered in 1835 in a dissecting-room subject, by Mr., now Sir James Paget, while a student at St. Bartholomew's Hospital. From this period up to 1860, they were often met with in subjects, and also found in many of the lower animals; but they were looked upon in the light of pathological curiosities, and nothing was known of their development, nor of the fact that they might occasion a violent disease in man. During the latter year Prof. Zenker of Dresden made the discovery that their development and growth were accompanied with grave symptoms, sometimes followed by death. Since this date numerous cases have been recorded, and extensive epidemics have occurred; so that the disease, called Trichinosis is now thoroughly recognized, and the history of the parasite better known than that of any other nematoid form.

As usually met with, trichinæ occur in the muscular system, closely coiled in a spiral form and enclosed in oval cysts, which appear as small specks, just visible to the naked eye, of a whitish colour, and measuring about 1-75″ in length. While in the muscles the trichinæ are immature, and though a digestive canal is present the reproductive organs are not fully developed. To attain maturity it is necessary that they should be transferred to the intestines of some animal, so that we may say the trichina exists in two forms, the larval form, represented by the muscle trichina, and the intestinal or adult condition. In the intestines the larvæ grow considerably, and in about two days after their ingestion become sexually mature. The female parasite contains an enormous number of eggs, which, while within her, develop into young trichinæ, and are born living and active the seventh day. These embryoes do not stay long in the intestines, but make their way through the walls and along the cellular tissue of the mesentery to the various voluntary muscles. Many, no doubt, gain entrance to the blood and lymph vessels, and are in this way quickly transferred to the most distant parts of the body. Having reached the muscles they

* Extract from a lecture on "Animal Parasites and their relation to Public Health," being one of the Somerville Lectures of the Natural History Society.

increase greatly in length, and in two weeks attain the full larval size. After wandering about for some time they roll up in small coils, a wall of connective tissue is gradually formed around them, and in this way they become encysted. The cyst wall thickens and is rendered opaque and white by the deposition of the salts of lime. It is in this condition, as oat-shaped calcareous cysts, that they are usually met with in the muscles, and in order to see the enclosed worm, it is necessary to employ a dilute acid to dissolve out the salts of lime. After a time—the exact period has not been determined—the worms degenerate and die; eventually the process of calcification involves them, and their remains may be detected as dark irregularly coiled fragments. The intestinal trichinæ after having given birth to a single brood of embryoes, also degenerate and die.

In addition to man, the trichina infects the pig, rat, cat, and several other animals. Experimentally they have been reared in rabbits, sheep, calves, and dogs. From this it is not difficult to see how man becomes affected; in the vast majority of cases it is through eating the partially cooked flesh of the pig, in which animal, above all others, trichinæ abound. The disease, trichinosis, is consequently most prevalent in those countries in which, by the customs of the natives, raw or partially cooked pork forms part of the dietary. This holds good in North Germany, for example, where the malady was first discovered, and where all the formidable epidemics have occurred.

The disease begins with gastro-intestinal disturbance, which, after lasting for nearly a week, is followed by prostration, high fever, and extreme painfulness in the muscles. These symptoms last a variable time, according to the severity of the attack; in mild cases, *i.e.*, cases in which few trichinæ exist, the patient may be convalescent in three weeks; in more severe forms many weeks or months may elapse. Death usually occurs in the fourth or fifth week from paralysis of the respiratory muscles, caused by the enormous number of trichinæ in their substance. The proportion of deaths varies in the different epidemics; in some it has reached 30%, in others it has been as low as 3 and 5. The prognosis in individual cases depends entirely on the number of living trichinæ which find their way to the muscles; the more abundant these are, the greater the danger. This, in turn, depends in great measure on the amount of parasites in the meat eaten, and the proportion which arrive at maturity in the intestines. When recovery takes place, it does not mean that the worms have died, but simply that they have become encysted, which is nature's mode of cure, for in this state they may remain living, yet harmless, for years. In north Germany, epidemics are of annual occurrence, owing to the barbarous custom of eating half-cooked or wholly uncooked sausages, which, even in respectable restaurants, are upon every bill of fare. In South Germany they eat quite as much pork, yet the disease is comparatively rare, the natives preferring their "wurst" thoroughly cooked. On this continent the malady is almost entirely confined to the German inhabitants who have not abandoned, in their new home, the semi-cannibalism of the "Vaterland." In the Dominion we have had very few cases; three occurred in Hamilton, in the year 1869, in a German family, and of three, two died.* They had partaken of a partially cooked ham in which, as I had an opportunity of judging, encysted trichinæ existed in abundance. The only other instances I know of, were in this city a few years ago, the circumstances of which will be fresh in the minds of many.†

(*To be continued.*)

THE McCONNELL CASE.

BY JOSEPH WORKMAN, M.D.

"*In the interest of the State it would be better to hang a murdering madman once in a while than to permit it to be understood that if a man will only foster and cherish his murderous impulses until they become ungovernable, he may escape the full penalty of his offence. For the good of the insane, the insanity law of the doctors is the best: for the safety of the lives of citizens, the judge's insanity law is indispensable.*"—*Vide Hamilton Times* of the 21st Feb. 1876.

"*Fiat experimentum in corpore vili.*"

To the Editor of the CANADIAN JOURNAL OF MEDICAL SCIENCE.

SIR: The above enunciation of the editor of the Hamilton *Times* is so frank and explicit a concession of the entire question at issue between him and me, on the just appreciation of the mental condition of Michael McConnell, at the time of killing Mr. Mills, that I might very safely allow it to pass unnoticed, were it not that having already drawn him down from his lofty perch, I cannot avoid hoping that his returning reason may permit him, in the end, to descend to the level of sound common sense. It must not be denied that the High Priest of the *Times* has a notable precedent to offer in support of his penal theory. A long time ago, on

* Vide.

† Vide Canada Medical Journal, Montreal, 1869.

a very momentous occasion, a certain other High Priest spoke very similarly, thus : " Ye know nothing at all, nor consider that it is expedient for us that one man should die for the people, and that the whole nation perish not."

Expediency, Mr. Editor, is a venerable and very potent authority in all cases in which " *the interest of the State*," is concerned. It ever has been so, and it would seem it is ever to be so ; but has it always, or ever, been found in the long-run, the safest pillar of States ? Did the expediency inculcated by *Caiaphas* fortify or re-integrate the Jewish nation ? Is the editor of the *Times* ignorant of, or does he ignore, the fact, that thousands of men have, in our mother country, in times not long past, been hanged for stealing sheep, or indeed for offences far lighter ? Learned Judges in pronouncing sentence on such offenders, were wont to tell the convicted that although the life of a man was more valuable than that of a sheep, yet, " the interest of the State " required that sheep-stealing should be prevented. It was prevented as far as the hanged man were concerned. Throughout many centuries the suppression of sorcery, witchcraft, and other diabolical crimes, was earnestly essayed by Legislators, Judges and prosecuting Counsellors. So late as the middle of the 17th century the great Sir Matthew Hale presided at the trials of witches, and not only applauded the verdicts of juries saturated with ubiquitous superstition and petrified ignorance, but expatiated largely and learnedly from the august seat of British Justice, on the reality and the enormity of the crime of witchcraft. A hundred years later, and the great juris-consult Blackstone was among its expiring believers.

Now, I would politely ask the editor of the *Times*, who, or what class of men first urged the plea of mercy on behalf of the sadly persecuted family of the witches ? Was it the Judges and Lawyers ? Was it the Clergy ? Let him condescend to dip into history a little deeper than, it is to be feared, he has done, and he will learn that in this great reform, as in many others, Doctors, not of Law, nor of Divinity, but of *Medicine*, have been the leaders ; and, thanks to their superior intelligence, their unswerving humanity, and their undaunted courage, the victory over legislative and judicial ignorance and barbarity was finally achieved.

But the erudite High Priest of the *Times* has been pleased to inform us that the Judges " have at least been in liberality in advance of the doctors, who, up to a few years ago, treated insanity more as a crime than as a disease."

The man who could deliberately pen the above misstatement must be either regardless of truth, or most defectively read in the annals of insanity and its treatment. Not until insanity began to be recognized as a physical disease, and not as a diabolical possession, were its unfortunate victims regarded as deserving objects of Christian philanthropy ; and who, and what class of men initiated the rational and humane system of treatment ? Proudly and triumphantly may the Medical Profession assert its claims to that honor. Who entreated, almost with tears, for permission to enter the festering cells of the *Bicetre*, and give bodily freedom to the long immured, chained, inmates ? I can hardly imagine that even the editor of the *Times* has not heard of *Pinel*. *He* fearlessly unchained fifty-three, though he was admonished that he would in all probability fall a victim to his own temerity. At the present day a *Pinel* may be said to be at the head of every insane Asylum in Europe and America. But when did the system of chains, starvation and stripes, in the treatment of insanity, give place to that which now obtains ? Is the *Times* ignorant of the fact, that only within the last fifty years has the direction of insane asylums and the efficient treatment of their inmates been committed to the medical profession ? Even to-day I could name at least two asylums, so called, in British Dominion, which do not yet rejoice in emancipation from non-medical domestic control ; and should the *Times* desire to visit them, with the view of brushing off his ignorance and moderating his sarcastic pace, I shall cheerfully give him travelling directions. The *Times* errs most egregiously in saying that medical men now " are disposed to go to another extreme, and treat not only insanity, but all crime, as the result of disease." I have yet to meet a respectable, moral, and intelligent member of the profession of medicine who entertains any such opinion. For my own part I have attended as expert witness in a number of murder cases, in which the plea of insanity has been urged by the defending counsel, and I have been deputed by the Minister of Justice to examine, and report upon the mental condition of several convicts under sentence of death. I can safely say that it has been my calm study, and unswerving purpose, to discriminate between actual crime and insanity. I believe as many have been hanged on my evidence and reports, as have been saved from execution by them. Not one of the latter, I am convinced, was wrongfully rescued, and, *as yet*, not one of the former has been unjustly punished.

Medical witnesses have nothing to do with the severity or lenity of the law. If it is consistent with British law, and the effectual administratior

of justice, that insane criminals should be punished just as sane ones, by all means let them be so punished; but let there be no legislative, legal or judicial jugglery, in any part of the process; nay, stoop not even to the bald pretext of *expediency*,—the abhorrent justification of the *means* employed, by the *end* to be achieved. Reverse the wheel of Christian rational progress, unseat the holder of the reins, and ensconce a Nero or a Torquemado in his place. Do this, and appease the hungry appetite of the *Times*. Would the *Times* have any objection to learn that some, at least, of the most enlightened British judges have begun to diverge from the beaten track, in their charges to juries, in cases involving the question of the mental condition of parties tried before them, on charges of capital offences?

The *Globe* has applauded the "*rough and ready*" method of deciding the prisoner's guilt, on the ascertainment of the fact of his knowledge of right and wrong, and of course the *Globe's* satellites must revolve deferentially around their centre of gravity, and men who have devoted their lives to the earnest study of insanity, and have honestly endeavored to acquaint themselves with its multiform protean shapes and shadings, must stand aside and bear with becoming humility and dread the sneers and scoffs of the inane penny-a-liners who do the drudgery required of them by their infallible dictator.

Last May, the boy O'Connor, who, on a certain occasion, had presented a petition and a rusty pistol at the Queen, and was found *sane* and guilty, and sentenced accordingly to penal servitude and the lash, once more turned up in his old haunts, and was soon captured, and "brought before Sir Thomas Henry, at Bow street, and *quietly removed to a lunatic asylum*, as mad as a March hare." The London *Telegraph* reminds the gentlemen of the long robe that "during his trial at the Old Bailey the law officers of the Crown laughed to scorn the physicians who expressed their strong belief that he was a lunatic." I know not on what canon of jurisprudence, or in obedience to what judicial precedent, O'Connor was adjudged to be not insane. If it was on the "*rough and ready*" rule applauded by the *Globe*, I should very much like to see the proofs of the boy's actual knowledge of right and wrong. In my belief it amounted just to this, that he thought it was wrong to detain the Fenians in prison, and it would be quite right to let them out. The sneer and the scoff might now well be turned on the other side; but physicians can afford to be forgiving. It is their daily experience to encounter ignorance, and it is their ennobling duty to pity it, and patiently wait, and work, for its removal.

But to return to the divergence of British judges from the beaten track, I would now submit to the *Times* the following extract from the charge to the jury by a Scottish judge, Lord Ardmillan, on the trial of a man named Tierney, at the Glasgow circuit court last September, for the murder of a fellow-laborer named Campbell.

Lord Ardmillan said, "Liability to sudden irritation, susceptibility to sudden provocation, sullenness, ill-temper, silence, gloom, none of these would do"; that is to say, to warrant a verdict of insanity. "All these," continues his Lordship, might exist without that *deprivation of reason*, that shattering of the powers of the mind which constitute insanity. But if there was a recurrence of the *disease, depriving the man of the power of controlling his actions, impelling him irresistibly to commit certain actions, that excluded responsibility.*"

Now, that which I deem worthy of special note in the above extract from Lord Ardmillan's charge is the total absence of the threadbare appeal to the "knowledge of right and wrong" test of mental competency and legal responsibility, or the knowledge possessed by the accused, that the act committed *was contrary to the law of the land.* Experienced alienists may, or may not concur with Lord Ardmillan in holding that "liability to sudden irritation, susceptibility to provocation, sullenness, ill-temper, silence, gloom," *all*, should be regarded as excluding the presence of insanity. Experienced alienists well know that, not only are these mental conditions, when *all* combined, but merely when only two or three of them are present, very usual concomitants of insanity. A physician examining any patient for the purpose of his commitment to an asylum, finding *all* the above facts, would perhaps not seek much farther, and examining physicians make much fewer errors of diagnosis of insanity than judges.

Lord Ardmillan, however, strikes out on new judicial ground, when he speaks of a "*disease* depriving the man of the *power* of controlling his actions, impelling him *irresistibly* to commit certain actions."

It was not until insanity was recognized as a physical *disease*, and no longer regarded as a metaphysical *ignis fatuus* that the world calling itself sane, began to regard it as amenable to rational, medical, humane treatment; and not until judges, barristers and jurors, shall have been taught to regard it in the same light, will they begin to comprehend its true nature.

Would it not be preposterous, say in an action of damages for mal-practice, that the sworn opinion of an eminent surgeon or physician should be disregarded and the judges or the prosecuting counsel should appeal to some or a score of old precedents utterly at variance with advanced medical or surgical science? Would the proprietor of the *Times*, in any difficulty requiring for its settlement a correct knowledge of the rules and customs of his craft, have more confidence in the decision of a carpenter or a watchmaker, than in a man pursuing the same business as himself? Has one of our judges ever spent an hour in a lunatic asylum? I never but once saw a judge inside the walls of the Toronto asylum; and that one came, not to visit the patients or acquaint himself with their mental peculiarities, but on private business.

I do not think that any more succinct or pointed exhibition of the contrast between law and medicine in their relations to insanity could be given than was submitted to the association of medical superintendents of American Asylums, by Dr. Landor, in a paper read before them by him, at their annual meeting in Toronto, in 1871. "Medicine," says Dr. Landor, "declares that insanity is physical and corporeal disease. Law, that it is not. Medicine says that imbecility and insanity are different conditions. Law, that they are identical. Medicine asserts that a theoretical" (and practical) "study of mental diseases and defects is necessary to a proper understanding of such diseases and defects. Law denies this, and says that insanity is a fact to be determined by any dozen of ordinary men in consultation on the case, selected at random from any class of the population. Medicine says that a man may be insane and irresponsible, and yet know right from wrong. Law says that a knowledge of right and wrong is the test both of soundness of mind and of responsibility to the law. Medicine says restrain and cure the insane. The object of the action of the law is punishment, and if its severity is mitigated, it is not by the law, but by the suspension of the law, by authority above the law."

[Owing to pressure on our columns we are forced to hold over the balance of this interesting letter till next month.—Ed.]

Professer Schröder, of Erlangen, has accepted the chair of Obstetric Medicine, in University of Berlin, vacant by the death of Professor Martin.

Meetings of Medical Societies.

WESTERN AND ST. CLAIR MEDICAL ASSOCIATION.

The fifth regular and second annual meeting of the Western and St. Clair Medical Association was held at the Rankin House, Chatham, on Friday, the 4th of February, at which were present Dr. Coventry of Windsor; Drs. Bray, Holmes, Murphy, Roe, Fleming, and Pentland of Chatham; Ross of Birkhall; Eccles of Arkona; Gaboury of Belle River; Harvey of Watford; Beemer of Wyoming; Mitchell of Wallaceburg; Tye of Thamesville; Samson and Richardson of Blenheim; Bucke, Johnstone, and MacLean of Sarnia; and by invitation, Drs. Smith and Shirley of Detroit.

In the absence of the President, Dr. Edwards, the chair was taken by Dr. Holmes, vice-President for Kent.

The minutes of last meeting were read by the Secretary and adopted.

Telegrams of apology and regret for absence were received from Drs. Edwards, Hoare, and Mott. Communications from several life assurance companies on the subject of fees for life assurance examinations were read by the Secretary.

The Treasurer's account with the Association was referred to auditors and reported correct.

The election of office-bearers for the ensuing year took place with the following result:

President—Dr. Bray.

Vice-President for	Essex,	Dr.	Carney.
"	Kent,	"	Murphy.
"	Middlesex,	"	Billington.
"	Lambton,	"	A. E. Harvey.

Treasurer, Dr. Tye; Secretary, Dr. MacLean.

Committee on Essays and papers, the President, vice-Presidents, and Secretary.

A resolution was unanimously carried, recommending to the Council of the College of Physicians and Surgeons, Ontario, T. H. Holmes, Esq., M.D., of Chatham, as a gentleman duly qualified to act as one of the examiners for the said College.

A motion was carried suspending the resolution adopted at the Strathroy meeting concerning life assurance examinations until other associations have been communicated with, and the Medical Council induced, if possible, to take some action or express some opinion upon the subject.

A paper was read by Dr. Eugene Smith of Detroit, on Catarrhal Opthalmia and Granular Lids; one by Dr. Murphy of Chatham, on Strangulated Hernia, with notes of three cases which occurred in his own practice, and upon which he had operated successfully. Dr. Beemer of Wyoming, read a paper on Anæmia; and Dr. Tye of Thamesville, one on Diphtheria. Each essayist received the hearty thanks of the association, and the papers elicited remarks from most of the members present.

Dr. Shirley, of Detroit, introduced a patient suffering from Menier's disease, and made some observations upon its pathology and treatment which were acquiesced in by Dr. Smith, who had also examined the patient.

By request an insufflator was exhibited by Dr. Shirley, for the application of impalpable powders to the pharynx in diphtheria, which gave rise to a prolonged discussion upon the pathology and treatment of that disease, the majority agreeing with the general treatment indicated in Dr. Tye's paper.

An explanation was given by one of the members regarding a circular addressed to his patients, which on motion was considered satisfactory.

Dr. Bray agreed to introduce a subject for discussion, and Dr. Samson to prepare a paper for the next meeting. Dr. Coventry and Johnstone promised to prepare papers for the Sarnia meeting.

The association, which, with a short intermission, had been in session for nine hours, then adjourned, to meet in Windsor on the first Wednesday in May next.

In the evening the medical fraternity of Chatham entertained the members of the association at a sumptuous dinner in the Rankin House, when a couple of hours were spent in pleasant social intercourse. The meeting altogether was most successful and enjoyable.

Miscellaneous.

The Royal Committee on Vivisection.—This Committee after taking a great body of evidence conclude, on grounds which they state at length, that it would not be reasonable, even if it were possible, to prevent experimentation on living animals. They refer to the whole history of medicine as pregnant with examples of benefits to humanity derived from such experiment. They quote, as illustrations, Harvey's great discovery of the circulation of the blood, the discovery of the action of the lacteal and lymphatic system of vessels, and the discovery of the compound function of the spinal nerves. These lie at the foundation of our present knowledge of the laws of natural life. Harvey's discovery, almost wholly due to vivisections, is the foundation of all our knowledge of the treatment of the diseases of the heart and blood-vessels, and in surgery bridges the intervals between the old practice of searing stumps with red-hot irons and the present use of the carbolized ligature. A great mass of similar and hardly less unimportant facts is furnished in the evidence. At present, investigations by experimentation are in progress, some under the auspices of Government, having relation to cholera, consumption, pyæmia, typhoid fever, sheep-pox, snake bite, and the use of disinfectants. Experiments such as these have resulted, and are likely to result in the mitigation, or possibly even the removal of some of the severest scourges which afflict the human race. Demonstrations in medical schools they hold to be necessary and permissible under the existing conditions, viz., that they be performed under anæsthetics. Adopting then, in all respects, the principles of the well-known resolutions of the physiologists assembled at the British Association in 1871, they propose to give them legislative force by the enactment of a law which would vest in the Secretary of State the power of granting licences to persons desirous of performing experiments on living animals. These licences would be revocable on proof of abuse, but the revocation should be subject to appeal to a judge of the Supreme Court, aided by three competent assessors.

The Abortion Bill.—The bill to amend the criminal law relating to the crime of abortion introduced by Mr. J. H. Cameron is as follows:

1. Any person, who by the use of any medicine, drug, noxious thing, instruments, or other means whatsoever, unlawfully and wilfully attempts to procure the miscarriage of any woman, whether pregnant or not, either intending to cause her death, or with the knowledge that by such use he may cause her death, and death ensues to such woman from such use of such medicine, drug, noxious thing, instrument, or other means, shall be guilty of murder.

2. Any person, who by the use of any medicine, drug, noxious thing, instrument, or other means whatever, unlawfully attempts to procure the miscarriage of any woman, whether pregnant or not, not intending to cause death, nor considering it likely that such use will cause death, and death ensues to such woman from such use of such medicine, drug, noxious thing, instrument, or other means, shall be guilty of manslaughter.

3. Any person who shall knowingly advertise, print, publish, distribute, or circulate, or cause to be advertised, printed, published, distributed, or circulated, any pamphlet, printed paper, book, newspaper, notice, advertisement or reference, containing words or language, giving or conveying any notice, hint, or reference to any person, or to the name of any person, whether real or fictitious, from whom, or to any warehouse, shop or office where any poison, drug, mixture, preparation, medicine, noxious thing, instrument, or means whatever, or any direction, advice, information or knowledge may be obtained, for the purpose or with the object or intent of causing or producing the miscarriage of any woman pregnant with child, shall be guilty of a misdemeanor, and on conviction shall be liable to be imprisoned in any common gaol or prison for a period not exceeding one year, with or without hard labour.

Dr. Gross, in his recent "History of American Medical Literature," uses the following languge in regard to theses:

"There is a species of medical literature peculiar to medical pupils, which, unfortunately, as I conceive, found its way into the New World from the Old, at the very commencement of the organization of our first medical school. I allude to what are called medical theses, or inaugural dissertations, the bugbear of the student and the nuisance of the professor. Of this variety of medical literature our colleges have huge piles, especially the older and more popular ones; for every spring, in the Ides of March, large additions are made to their archives, usually badly written, not unfrequently ungrammatical, generally devoid of scientific information, and of no use to anybody, for it is not too much to say that not one in fifty affords the slightest evidence of competency, proficiency, or ability in the candidate for graduation. Often, indeed, they are not even composed by him; and occasionally, as I know from personal observation, they are plagiarized or copied, it may be verbatim, from such books as are within his reach, if not actually from the works of his preceptors. Happily, for the credit of the schools, few of these productions find their way into print. In the early history of medical teaching in this country the theses were generally written in Latin, as is still the case in some of the schools of Europe; and it was the custom, for a time at least, for the more prominent students to defend them publicly on commencement day. * * It would be well if, on the birth-day of American Independence, a bonfire could be made of this trash, as it exists, without exception, in all our medical schools; and it is devoutly to be wished that the regulation which prescribes the presentation of the inaugural dissertation were abolished.—*St. Louis Record.*

Inversion of the Uterus.—On the 14th inst., a married woman in the West end of the city being in labour, was attended by a midwife. The child was born at half-past six p.m., and the placenta not coming away readily, the midwife made traction on the cord and felt "a large hard lump" come away, followed by flooding, but it is not stated how long after the birth of the child this took place. A medical man was called about midnight, and found the uterus completely inverted and flaccid, with the placenta attached to the fundus and the woman apparently dying from hemorrhage and shock. Stimulants were given, the placenta detached and the uterus partly returned, when the woman died.

An International Medical Conference.—We have received the following communication from Dr. David, Secretary to the Dominion Medical Association: "At the meeting of the Canada Medical Association, held at Niagara, in August, 1874, it was suggested that a Conference between the sister society, the American Medical Association and our own would be attended with great advantages were it possible to be obtained, and resolutions to that effect were duly proposed and carried, and at the last meeting of the American Medical Association held in Louisville, the resolutions passed by the Canada Medical Association were read and unanimously approved of, and the following gentlemen: Drs. S. D. Gross, Philadelphia, Pa.; I. T. Hogden, St. Louis, Mo.; Austin Flint, sen., New York City; W. Walling, Louisville, Ky.; L. C. Lane, San Francisco, Cal.; Wm. Johnston, Jackson, Miss.; Wm. Brodie, Detroit, Mich.; J. M. Toner, Washington, D.C.; F. D. Cunningham, Richmond, Va.; E. Andrews, Chicago, Ill.; W. B. Atkinson, Philadelphia, Pa.; D. J. Bowditch, Boston, Mass. and Robert J. Bartholover, Cincinnati, Ohio, were named as a Committee of Conference 'to meet a like number from the Canada Medical Association at such time and place as may be agreed upon by the joint Committee of the Associations.' At the meeting of the Canada Medical Association held at Halifax, N.S. last August, the communication of the above having been read, the following gentlemen were named as its representatives at the Conference, Drs. Grant, Ottawa; Hingston, Montreal; Hodder, Toronto; Botsford, St. John, N.B.; Thorburn, Toronto; Farrel, Halifax, N.S.; Fulton, Toronto; F. W. Campbell, Montreal; Atherton, Fredericton, N.B.; Howard, Montreal; Robillard, Montreal; Parker, Halifax, N.S., and David, Montreal. As it was found impossible to adopt the idea of Professor Gross, the President, to hold the meeting at Saratoga, in September next, it has been decided that the Conference take place in Philadelphia, on Monday, 5th June, and we trust all the members will faithfully attend."

Carbolized Catgut Ligature.—The following is the method of preparing this ligature. The material is really a part of the peritoneum of the sheep, with some fibres of unstriped muscle. This having been properly cut into lengths and sizes for ligatures, might be simply dried and used, or used fresh, but in either of these conditions it is slippery, hard to tie, and when tied apt to stretch, and the knot to slip. Mr. Lister, anxious to procure a ligature which should melt away and be absorbed without acting as a foreign body in the wound, and looking to the somewhat unsatisfactory experiences of Astley Cooper and others, found that by a special preparation this catgut was so altered as to become a firm and useful ligature. It is suspended in an emulsion of oil and water, during the first few days it becomes dull and opaque, but then a remarkable change occurs: it becomes clear, bright and hard and capable of being tied without stretching and slipping. In order to attain this changed condition it is necessary to keep it suspended in the emulsion for about two months, the bottom of the vessel being so arranged that the water, as it separates from the oil, falls down clear of the suspended catgut. It will be ready in two months, but it goes on improving if kept in the emulsion for a much longer period. In order to make a very fine emulsion the water was mixed with something which the oil would take from it—say spirits of wine—and the water was thus left suspended amongst the oil in very minute drops. Mr. Lister wished to have an antiseptic ligature, and he found that carbolic acid had the requisite properties for forming along with water and oil the required fine emulsion. Hence the *carbolized* catgut ligature.—*Medical Times and Gazette.*

Death of M. Andral.—This celebrated physician and pathologist died on Feb. 13, aged 79. The following passage is from M. DeRause's notice of his death. "Among the masters whom the generations who have succeeded each other from 1825 to our own day have learned to appreciate, to love and to respect, M. Andral has occupied the first rank, and even those who have come on to the scene since his retirement from active life have none the less undergone the influence by a kind of tradition, if not directly through himself, which he has never ceased to exercise. This influence has not remained limited to the men and the things of our country. M. Andral was at the head of the French school at an epoch when this school had no rival, and when Paris was the general resort of all foreigners who were desirous of perfecting and completing their studies and of discovering new horizons. Thus was the authority of his teachings promptly conveyed to the schools of other countries, and we have no fear in saying that a universal homage, without any distinction of nationality, will be rendered to the memory of him who will remain one of the greatest medical glories of the age."

☞ The primary and final examinatfons of the College of Physicians and Surgeons of Ontario commence April 4th. There are 108 candidates.

The following extract is from an editorial in the January number of the St. Louis *Clinical Record*:—On the most trivial pretext the physician is commanded by the authority of the State, which he dare not disobey, to leave his business, to leave his patient, whose life may be the price of some pettifogger's whim, and dance attendance upon some court of justice (?) while it suits the lawyer's pleasure, and this without compensation! For the fees to which he is legally entitled are generally quietly pocketed by the gentlemanly clerk who issues the subpœnas, with equal grace, cheerfulness and alacrity. That a man's ideas and opinions are his property, as much so as goods and chattels or real estate, is now pretty well recognized; our laws relating to patents and copy-right are based upon the fact. The State has no more right to call for a physician's opinion without offering him due compensation for it, than it has a right to his house and land or his books and instruments. This practice of wholesale robbery has gone about far enough, and the matter ought to be tested before the courts. By right of eminent domain the State may confiscate private property when the public need is great enough to overshadow private right, but only on condition that a just and proper compensation is given. On the same principle, a physician's opinion, based on years of study and careful observation, should be had when the needs of justice demand it, but a compensation should be allowed him in some degree proportionate to the tax made upon his time, and in some way thus repay him for his previous study and application. [So say we.]

Fistula in Ano.—Prof. D. Hayes Agnew, makes the following valuable observations: "Very important offices have been attributed to fistulæ. They have been thought to be the means of discharging from the system various morbific materials, especially in cases of phthisis pulmonalis. I have never seen any such salutary effect exerted by them in disease of the lungs or in any other disease, and the only question which I ask myself is whether the patient's general health is good enough to warrant the operation. Neither have I ever observed any bad effects follow its performance in cases of pulmonary disease."—*Louisville Med. News.*

The Bleaching of Bones and Ivory has been rapidly and successfully carried out at the museum of the *Jardin des Plantes*, by immersing the articles in spirits of turpentine, taking care that they are kept a short distance from the bottom. When treated in this manner and exposed to sunlight, a few days, it is said, suffice to free bones from fat and disagreeable odor, and render them beautifully white. Woods of different kinds may also be bleached in this manner. The necessity of keeping the articles from touching the bottom of the vessel is on account of an acid substance which collects at the bottom of this fluid, and is capable of attacking the substance being bleached.—*New York Med. Record.*

An outbreak of Enteric Fever at the Village of Nunney, Somersetshire.—The following are the inferences to be drawn from Dr. Ballard's report on the subject:—1. That the fever in Nunney was enteric. 2. That it was brought into the village from a distant place by an individual whose evacuations, and those also of others attacked in the same and the adjoining house, found their way into the Nunney brook at the upper part of the village. 3. That the fever spread in the village in consequence of the villagers habitually drinking the water of the brook thus contaminated, which water was still further polluted with the sewage of the village itself, containing, if not the actual excrement of the sick, yet certainly matters washed out of their soiled linen, and also more or less of their liquid evacuations. 4. That at the time of my visit, actual excrement from cases of enteric fever was finding its way into the brook at a hamlet only half a mile from the village of Nunney. The explanation above given of the origin and spread of fever in Nunney is confirmed by the sudden reduction in the number of fresh cases of the fever on the expiration of the week ending October 5. The causes of pollution of the water of the brook pointed out in the course of this report were still operating, but on and after September 24th, water from an unpolluted source was brought in carts into the village daily for the use of the inhabitants. It could scarcely be expected that the brook water

should at once have fallen entirely into disuse ; that none of it should have been used by any one in the village. Such changes are never to be effected suddenly. The result observed was just such and such only as I looked for. From eight to thirteen fresh cases had been coming under observation weekly for a period of five weeks; but in the week following the twelfth day from the introduction of unpolluted water the weekly number of cases fell to five, and in the next week to one.—*Medical Times and Gazette.*

Death of another Lady from Chloral.—Another death is reported from the reckless taking of chloral privately. In this case the victim was a lady of about thirty-five, who resided with her step-father at Exeter. She had, it is said, been in the habit for two years past of taking chloral "to soothe pains in the stomach," and had been repeatedly found lying on the floor in an unconscious state from its effects. The preparation she usually took was that known as "Hunter's solution of chloral," which has been ascertained to contain twenty-five grains of chloral to the drachm, and each bottle contained 300 grains. It is calculated that the deceased took 125 grains within two hours. It is futile to caution those who are in the habit of taking sedative narcotic preparations of the risk of doing so except under medical supervision : the only plan likely to succeed is to place heavy restrictions on their sale.

The Longevity of Brain-Workers.—*By George M. Beard, A.M., M.D.—Separate Pamphlet.*—Dr. Beard assigns as the cause of the exceptional longevity of great brain-workers : — 1. That great men usually come from healthy, long-lived ancestors. 2. That a good constitution usually accompanies a good brain. 3. That great men who are permanently successful have a correspondingly greater will than common, and force of will is a potent element in determining longevity. The one requisite of great success is "*grit.*" 4. Great men work more easily than ordinary men. 5. Great brain-workers have not all been rich nor all been poor. The majority have been most of the time surrounded with at least moderate comforts.

The Health Officer's Report of the city of Oakland, for the year 1875, informs us that Oakland is a city of about 25,006 inhabitants, situate on San Francisco bay, with a rainfall of about 21 inches, a minimum temperature of 30°, a death rate of 13½ per 1000 ; the unavoidable being 9 per 1000. The birth-rate was about 21 per 1000, showing a slight decrease for the last three years. During the last year 205 children were born of U. S. parentage, 84 of mixed, and 235 of foreign ; but the report shows that while more children are born of foreign parentage, a greater number of those born of U. S. parentage survive the first year.

Unlike some pretentious cities we know of, it has an active Board of Health composed of medical men, of which Geo. E. Sherman, M.D., is health officer, and C. S. Kittridge, M.D., is secretary ; and what is more interesting to eastern cities, it has an excess of 2648 adult males. *Verbum sat.*

Professional Muscular Atrophy.—Dr. E. Onimus, in a short article with this title, says : Activity of muscles determines the development and energy of muscular fibres, and the general law is that the more a muscle works the larger and the more powerful it gets. This law, however, has its limits, and I have just observed a certain number of cases in which the exaggerated work of certain muscular groups, far from producing hypertrophy, induced, on the contrary, a condition of considerable atrophy.

These cases are observed only in individuals who, through the nature of their trade or work, are obliged to contract the same muscles constantly. Through excess of activity, irritation of the muscular fibres supervenes. Thus, in a man employed in a draper's establishment, and whose business was to replace the unfolded goods on their shelves, there supervened, little by little, a most remarkable atrophy of the deltoid muscles of both sides. And, indeed, it was these muscles which were constantly actively employed in performing this special work.

In a workman employed in a tannery, who was every day for eleven hours at work, and always felt aching and fatigued after his day's labor, there likewise supervened marked muscular atrophy, confined to certain muscles. In

order to prepare the skins, he had to perform with both arms a forward and a backward movement, which necessitated especially the action of the muscles of the shoulder, so that these were the first to be affected, and are at present almost completely atrophied. The wasting away is almost the same in both arms, as both were in action during the man's work, whereas, in respect to the legs, the right one alone was obliged to support the whole weight of the body. Consequently, with the lower limbs, the right leg is the only one that has wasted; it is one-half smaller than the other, and the affected muscles are those the action of which was the most constant, such as the rectus femoris, vastus externus, and vastus internus.

In the beginning, the patients complain especially of prostration, of weakness even in the morning on getting out of bed. They feel—particularly at the outset of the disease—intense, darting, intermittent pains. Before atrophy is well marked, there always exists more or less temporary contraction of the muscles.

When wasting has once begun, it follows a most rapid course if the patient continues to fatigue his muscles.

Almost always this affection is mistaken for progressive muscular atrophy, but it differs from it in its course and in a great many of the symptoms. 1st. The muscles which are the first to be affected are generally the largest ones, and particularly those in the neighborhood of the shoulder-joint. 2nd. The pain and cramps at the outset are also a distinctive sign. 3rd. These cases of wasting amend rather rapiply under the influence of rest and the use of constant and continuous electric currents.

Recently I observed one case which it was most difficult to differentiate from progressive muscular atrophy, as the atrophied muscles were the same as those which are the first affected in this latter affection. They were the muscles of the thenar eminence, and chiefly the abductor pollicis. The patient was an enameller, who had to hold an object all day between his thumb and index-finger. He first got cramps in the thumb, which suggested the idea of scrivener's palsy, then tremor of the thumb, on account of the fibrillar contractions, and lastly, atrophy. Under the influence of treatment there was a rapid amendment, which showed that the case was really one of professional muscular atrophy, and not commencing progressive muscular atrophy.—*Monthly Abstract.*

Rupture of Heart.—Dr. R. E. Van Giesen, of Greenpoint, presented to the New York Pathological Society, a heart showing rupture of the left ventricle. The history of the case was interesting as affording a premonitory stage. It was, briefly, as follows: A man sixty-five years of age, was seized with sudden vertigo on November 23rd, after suffering from severe grief for the loss of a near friend. Two days after, Dr. Van Giesen saw him; he was then having an attack of nausea and vomiting, accompanied with pain in the chest. Previous to this he never had been sick during his life. During the evening of the day in which the doctor saw him he was very comfortable, and continued so till one o'clock in the morning. At that time, while urinating, he sprang from his bed and dropped dead. The autopsy was made thirty-three hours after death. All the viscera, with the exception of the heart and aorta, were healthy, with the exception of the liver, which was fatty, and extended up to the border of the third rib. The pericardium was half filled with fluid blood. The right ventricle was very thin, and at a point near the septum there was a rupture about an inch in length. From a superficial examination it would seem as if the wall of the heart had undergone fatty degeneration. It was referred to the Microscopical Committee for report. In answer to the question of Dr. Van Giesen as to what was the cause of the preliminary trouble, Dr. Delafield said that cases occur in which the rupture is gradual and oblique. In cases of such a class there are premonitory symptoms, but in the case presented there were no evidences of such a condition. Dr. Van Giesen said that when engaged in the naval service he saw, personally, the death, from cardiac rupture, of Ripley, a distinguished gunner. While Ripley, in asking for a chew of tobacco, reached out his hand, he dropped dead. At the autopsy the rupture was found on the anterior surface of the ventricle. The wall of the ventricle was as thin as tissue-paper. The pericardium was completely filled with coagulated blood, forming a perfect cast of the heart and pericardium.

Sickness of Pregnancy.

Pass the finger into the os and slightly dilate it till the puckered edge is smooth. This will not bring on premature labour. Judging by three cases in which this plan proved successful, after all other means of treatment had failed, the os will be found patent, puckered, and dilatable. This means of cure was accidentally found out in a case which was so serious as to appear to necessitate the induction of premature labour. The os was slightly dilated by the finger in the manner described, but nothing further was done at the time. The sickness ceased at once, and the patient went to the full term of pregnancy.—Dr. E. Copeman, in *British Med. Journal.*

Rupture of the Kidney.—A boy was caught between the wheels ot a waggon and received a aevere crushing of the abdomen. There were no signs to indicate any special lesion. Death occurred in twenty-four hours. At the autopsy there was found to be rupture of one of the kidneys.

Births, Marriages, and Deaths.

BIRTHS.

On March 2nd, at Angus, Ont., the wife of F. L. Nesbitt, M.D., of a son.

At Guelph, on the 6th inst, the wife of Dr. Harkin, of a son.

At Ottawa, on Saturday, 11th inst., at No. 185 Rideau Street, the wife of Dr. Clarence R. Church, of a son.

MARRIAGES.

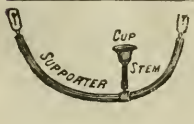
On Saturday, March 4th, at the residence of the bride's father, by the Rev. John Fletcher, M.A., Hugh Spears, Esq., M.D., Toronto, to Constance N., youngest daughter of Col. Norris, 12th Battalion, LL.D., county of York.

DEATHS.

At Brantford, on Wednesday, the 15th inst., Caroline, widow of the late Dr. Alfred Digby, aged 67 years.

At Lambton Mills, on Saturday, the 26th ult., Elinor, the beloved wife of Thomas Beatty, M.D., aged 49 years.

At London, Ont., on Thursday, March 2nd, Ellen Lane, youngest and beloved daughter of Henry Going, M.D., and grand-daughter of the late Ven. Archdeacon Brough, aged 18 years and 4 months.



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This valuable preparation is the solid substance of SEVEN MINERAL SPRINGS in Washington county, Va., and is reduced to a "Mass" by evaporation. The following analysis, made by Prof. J. W. Mallet, finds it to consist chiefly of IRON, ALUMINA, MAGNESIA, GLAUBER SALTS, and LIME.

Analysis by Prof. J. W. Mallet, of the University of Virginia.

The Mass appears as a stiff dough, or soft solid, of light gray color, and marked acid reaction to test-paper. The contents of everal bottles having been thoroughly mixed, the following composition was found for the mixture in 100 parts:

Aluminum Sulphate	15.215	Potassium sulphate	.060
Ferric sulphate (per-sulphate iron)	4.628	Sodium sulphate	.226
Ferrous sulphate (proto-sulphate iron)	.412	Lithium sulphate	.019
Nickel sulphate	.162	Ammonium sulphate	.022
Cobalt sulphate	.014	Sodium chloride	.326
Manganese sulphate	.257	Calcium fluoride	trace.
Copper sulphate	.008	Calcium phosphate	trace.
Zinc sulphate	.301	Silica	1.504
Magnesium sulphate	16.006	Organic matter	.123
Strontium sulphate	trace.	Water	42.938
Calcium sulphate	17.538		99.759

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WM. WHITE, M.D., H. M. GRANT, M.D.,
M. Y. HEISKELL, M.D. E. M. CAMPBELL, M.D.

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This "Mass" is sold by some of the leading Druggists in cities and towns, but in order that Physicians and others may have a better opportunity for procuring it, we will mail to their address six packages on receipt of $5, or for a less number $1 per package. All orders entrusted to us will be attended to promptly. The usual discount to the trade.

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TORONTO, MAY, 1876.

Selections: Medicine.

CLINICAL DEMONSTRATIONS OF PHTHISIS,

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

By JAMES EDWARD POLLOCK, M.D., F.R.C.P.,

SENIOR PHYSICIAN TO THE HOSPITAL.

LECTURE I.

Gentlemen,—I know of no subject more difficult of clinical illustration than phthisis. This is partly due to a shifting pathology, which must be followed if we are to keep pace with the increasing knowledge of the day. It also arises from the difficulty of illustrating living cases by post-mortem appearances, and this again is due to the rapid changes undergone by the morbid product in the lung. These changes, as you are aware, are partly chemical and partly vital, and the life of tubercle is short, although the life of the patient may be long. Still, it is so highly necessary to rational clinical teaching that we should associate pathological changes of structure with the living phenomena of disease, that before proceeding to the wards I have endeavoured to arrange the pathology of the day with the natural classes of phthisis. In this I have been partially successful. Yet there are many cases in practice of which we cannot say with certainty to what form of phthisis they have originally belonged, or what morbid influence has given rise to them. If I were to clear up this uncertainty by a dogmatic classification, I should deceive you and myself, but if I can throw the several varieties of this multiform disease into some natural groups, I shall have helped you to a better understanding of that which you see in the wards.

Let me therefore briefly review the leading points of the teaching of the last thirty years about consumption. In my early days the doctrines of Laennec ruled Western Europe. The grey granulations, semi-transparent, disseminated, or grouped in the lung, were the essence of the disease. They were considered as new formation, not old tissue. From their inherent tendency to degenerate and decay they became caseous—what we now call fatty degeneration,—softened and ulcerated the lung, and formed a cavity more or less large in which all the lung tissues were merged and destroyed. Laennec was opposed by Broussais, who advocated the inflammatory origin of this as of most diseases. Heat of opposition and strong argument are not, as you are aware, likely to beget changes of opinion, and the two rival theorists did not modify their views and strike a balance, whereby we might perhaps have been gainers. At all events, Laennec's theory had this merit, that it harmonized remarkably with clinical experience or the living forms of disease.

But in this country there have always been independent observers, and Addison, Stokes, and others recognized the fact that in many cases of phthisis inflammatory products played a chief part, while in many others no tubercle at all was to be found. A more careful microscopical examination has done much for us, unsettled some of our views, and, without doubt, created uncertainties; but it has also clearly proved that some of our forms of tubercle, and of those, too, which ulcerate and

break up the lung, originated in inflammatory action, and consist of inflammatory products. Still later Burdon Sanderson, who I am proud to think was one of our colleagues, advanced the opinion that tubercle, or the *materies morbi* in consumption, is only a hyperplasia or overgrowth of the natural structure found in all lymphatic glands, in the lung surrounding the vessels and air-cells and entering into the interlobular tissue, found also, as we know, in the omentum, peritoneum, and spleen. This he calls *adenoid*, and he holds that it is subject to degenerative changes, may liquefy, soften, and be expectorated, or become caseous without softening, and dry up or become cretaceous. It will do all, in fact, which the so-called tubercle is known to undergo. It is capable of another change also—it is convertible into or causes the hypergrowth of *fibrous or fibroid tissue*, which is found naturally in the lung. This fibroid plays an important part in all old cases of slow phthisis. It extends through the lung, surrounds and strangles the bronchioles and vessels, furnishes walls to cavities, and branches through the lung in all directions to the pleura. It binds together and consolidates all tissues and contracts the lung, causing the chest walls to fall in. Of this form of disease I shall have occasion to speak again. Out of these several pathological conditions arises a somewhat natural classification, of which we shall avail ourselves. But first we must have a definition of phthisis which will fit all cases. We will call it a disease which ulcerates the lung and wastes the tissues of the body. It is not merely a lung disease either in antecedent history or in actual symptoms. Local and constitutional disorder co-exist, and if there be such a thing as a purely local disease, it is surely not phthisis. Therefore it is not to be studied with the stethoscope only, nor to be appreciated by symptoms alone. To define the local disorder more minutely, we will say that it is a deposit or thickening in the lung, blocking its tissues, with great proneness to change or liquefaction, fatty degeneration or caseation. Till you get this there is no phthisis. Add co-existent irritative fever and waste of body, nutrition interfered with, and till you get this there is no phthisis. The diagnosis lies in the union of signs and symptoms. Auscultation may tell the amount and degree of lung disease, but not the vital cause nor the state of the patient. We are too proud of our stethoscopes! The most careful study of symptoms will fail at times to discover phthisis, although a practised eye will often tell the stage of established disease without examination.

We will take in order the forms of *phthisis of inflammatory origin*, and afterwards the *lymphatic*, and finally *fibroid* phthisis. But, first, I must say a few words about *acute miliary tuberculosis*. You do not often see it in these wards, for its rapidity and our delay in admitting patients exclude it. Patients die of this form of disease in a few weeks, I had almost said days. I need not therefore detain you long about it, for it is intractable and uninfluenced by treatment, and always fatal. There are two forms. 1. The *acute*, with rapid softening of a deposit which is spread through both lungs. A high temperature and pulse denote the excessive constitutional suffering. The physical signs spread over both sides reveal deposits and softening in its various stages at the same time. With these there are commonly gastric symptoms —red tongue, thirst, vomiting, anorexia—and delirium, which is rare in chronic phthisis, may occur before death. 2. The other form is a comparatively passive exudation, as it were, of miliary tubercle throughout both lungs which has no time to soften. But from exhaustion the patient rapidly sinks. The physical signs denote pretty uniform impaction of the lung—diminished resonance, feeble respiration, and lessened movements. I have seen this form prove fatal in three weeks, and the patient has scarcely coughed; but the temperature was high and the nervous exhaustion great. These cases, like the former, are uniformly fatal.

To facilitate our study of phthisis, I have drawn out for you a table (see next page), which will be found to include all varieties, from the lightest form of alveolar catarrh to the most advanced and chronic case. In constructing it I have had in view the modern theories, but it is not the less true that in one or other of these niches you may find all your cases in practice. The theory or the name may change, but facts remain and the often-repeated features of disease.

But first let me say that the eminent and inseparable feature of phthisis is the localization of the disease. Stokes used to say "localized bronchitis with dulness is phthisis;" and so is localized pneumonia which does not clear up within a certain time.

The very first on our list, *simple alveolar catarrh*, derives all its importance from its being limited to one part of the lung. If spread over the whole, or over both lungs, it becomes a bronchitis. A localized alveolar catarrh has often the notoriously insidious character of phthisis. Its approaches may be unannounced. With subfebrile symptoms your patient will have slight cough, some wasting and impairment of strength. Your physical examination may or may not detect dulness, but harsh breath-sounds, and even crackle are soon heard. He thinks he has a cold; you are uncertain whether he has not a consumption, for the case runs on for weeks, or even months. The physical state consists in a block of the minute tubes, thence to the alveoli, which become filled with cellular products. These disintegrate, become fluid, are expectorated, and he recovers. In more severe cases, the alveoli are blocked by large granular cells, which speedily undergo fatty degeneration, and are expectorated, but the walls of the alveoli are damaged and collapse, and the disease stops here. The chest-walls fall in slightly, there is some flattening and impaired movement, and the breath-sounds are deficient. There is, indeed, a small portion of lung not breathing at all. There is no *tubercle* in this case, and the patient recovers. But alveolar catarrh may have a second termination. The cellular products of disease undergo fatty degeneration, the fluid matters are absorbed, it becomes cheesy or cretaceous, and may remain so for years. This is one form of obsolescent tubercle.

Phthisis.

Acute tuberculosis.

1. Passive invasion of the whole lung by miliary tubercle.
2. Progressive deposits; rapid softening.

Simple alveolar catarrh.

1. Cellular products expectorated (recovery).
2. Alveolar products soften; collapse of walls (recovery).
3. Alveolar products remain, become caseous, cretaceous (obsolescent tubercle).

Catarrhal pneumonia,
Broncho-pneumonia,
Lobular pneumonia,

Alveolar walls, lung-tissue destroyed (cavity).

Lymphatic phthisis,
Adenoid (Sanderson),
Tubercle (Laennec),

Overgrowth of lymphatic tissue; lobular pneumonia deposits; softening; vomica.

Fibroid phthisis.

Of various origin. Interstitial fibrous growth; contracted lung (chronic phthisis).

A *catarrhal pneumonia* is accompanied by a greater exudation of inflammatory products, which produce a more intense block of the lung. This is a broncho-pneumonia, or lobular pneumonia, often seen after pertussis and other acute affections of early life. It is limited to one portion of a lung. Not only the minutest bronchi, but the alveoli suffer, and their walls break down and liquefy. All tissues of the lung are ulcerated through, and what is called a "cavity" is formed. These changes are accompanied by the most violent febrile symptoms, temperatures from 101° in the morning to 104-6° in the evening, followed by excessive sweatings, and accompanied by rapid wasting of tissues. All this may cease, as you will afterwards have occasion to see, and your patient may partially recover, and a dry cavity result, or a chronic secreting cavity, or a chronic extending cavity ending in secondary deposits in the lung and progressive waste. And of these various terminations I shall show you examples. Now bear in mind that all these forms of disease—that is, alveolar catarrh (mild or severe) or catarrhal pneumonia—may exist in local parts of the lung and yet there may be no tubercle according to modern pathology. At the same time these were the very changes in the lung well described by Laennec!

We come now in our list to consider *lymphatic phthisis*, with which I have classed the *adenoid* of Sanderson and the *tubercle* of Laennec. Tu-

bercle properly so called is, according to modern teaching, a morbid growth of the lymphatic class, a hyperplasia of gland-tissue—not a new formation, nor an extraneous product, but an overgrowth of that which was always there. For, according to Burdon-Sanderson, adenoid tissue is found normally in the follicles of lymphatics, in the spleen surrounding the Malpighian follicles, in Peyer's glands, and in the lung around the bronchial tubes and the vessels which it accompanies. It is also found under the pleura, just as it is seen in the omentum and around the vessels of the peritoneum. Cell-formations in tubercle do not differ from inflammatory exudation, nor from those normally existing in lymphatic structures. An *overgrowth under irritation* is the term now applied to this extension of adenoid growth. It consists of grey granulations in the alveolar walls, in the connective tissue, around the vessels, and under the mucous membrane of the bronchi, and is vascular. Its tendencies, the changes which it undergoes, are of the last importance to us, for in them we find the history of advancing or of retrogressive phthisis. Adenoid is capable of fatty degeneration, breaks up, liquefies, is removed, just as you see in the chronic or acute suppurations of lymphatic glands; for if you watch the external glands in suppuration, you have under your eye the changes which lymphatic tissue undergoes in the lung. Again, it is capable of fibrous transformation. It is convertible into fibrous tissue, in fact, and so furnishes walls to cavities in the lung, surrounds and obliterates vessels and bronchi, binds together and contracts the lung, and, as we see in all cases of chronic phthisis, preserves life for a time by conversion of the light vesicular lung, with its immense supply of blood and ever-moving tissues, into a dense, almost impervious, mass, scarcely capable of expansion, while it narrows and obliterates the blood and air conduits, and so arrests the circulation that hæmorrhages are comparatively rare.

Burdon-Sanderson regards artificial tubercle, which, as you know, he produces in certain animals by inoculation, as an *overgrowth*, and not a new growth. And I will briefly state the results of his experiments on the rodentia in order that you may compare them with what you see in phthisis. After inoculation the lungs are found disseminated with minute nodules of lobular catarrhal pneumonia; the alveoli are choked with epithelial cells, and the alveolar walls are thickened by growth of adenoid tissue. These masses coalesce, and each one caseates in its centre, becomes opaque and soft, and disintegrates; in fact, a vomica is formed. This result of inoculation is very like, indeed, almost identical with, that which takes place in ordinary tubercle in man. I am not here going to diverge into the question of the inoculability of tubercle in man—that is another question, not yet settled; but it is quite likely that primary deposits in the lung may propagate themselves by secondary deposits, the result of a kind of inoculation. These experiments on animals are of the very highest importance, inasmuch as they are pictures of an obscure disease, producible at pleasure, and a disease, too, which we have hitherto been content to refer to that ill-defined power, constitutional disorder. In the present state of our knowledge, then, it is not to be forgotten that any morbid or septic matter introduced into the blood will produce effects on the lung like tubercle, and also that hitherto only one class of animals—the rodents—appear to be susceptible of such inoculation.

But you must bear in mind that other opinions besides those of Burdon-Sanderson prevail. Williams holds that tubercle is not a mere adenoid growth, but an excessive multiplication of perishable cells, or leucocytes, such as the corpuscular lymph of Paget, and the croupous of Rokitansky. With these theories I have nothing to do now, my object being to give you intelligent clinical illustrations of phthisis, and to show you into what classes or varieties you may distribute the cases you meet with in the wards. The pathological theory may change, but the facts abide with us in indelible characters. These destructive forms of disease—the lymphatic, ordinary tuberculous, or pneumonic, including what was formerly called struma—may be fitly considered together, as they comprise most cases of ordinary phthisis.

I shall also ask your attention to still another form of phthisis, which includes several varieties. It has been called *fibrous* or *fibroid phthisis*,

as it is characterized by an excessive interstitial fibrous growth. It has been considered as in itself a separate idiopathic disease with such distinctive features as, in the opinion of some most careful observers, to entitle it to a different name and identity of its own. As I believe it to be the sequence and inevitable result of many forms of disease, and inseparable from several varieties of consumption, I must describe it to you as I have seen it, and can show it to you, as of various origin. Thus a catarrhal pneumonia attacks the fibrous stroma of the lung, or that interlobular tissue which gives sheaths to the vessels and bronchi, and which underlies the pleura. Inflammation increases its growth—*growth under irritation;* and thus the vessels and bronchi become strangled, the alveoli collapse and are surrounded, and, when cavities form, their walls are provided with a fibrous covering. Trabeculæ are left traversing the whole lung, which becomes contracted, and the side falls in and organs are displaced. In like manner all the forms of the lymphatic phthisis are attended in their more chronic stages by over-development of fibrous tissue, producing contraction of portions of lung, and hardening and blocking its tissues. Indeed I know of no form of phthisis, excepting the acute varieties (where there is an invasion of tubercle throughout the pulmonary structures), in which the hyper-development of fibrous tissue does not occur. In the acute tuberculosis there is neither time nor (as it were) space for such overgrowth. The disease is too short, and it never reaches the period of fibrous transformation. But in the chronic forms, that which is called tubercle, or adenoid, by its very chronicity affords time and opportunity for such changes. For take the most advanced disease met with in the post-mortem room—examine that lung riddled from end to end by irregular cavities till no vesicular tissue remains in it, and what is it? Why, fibrous tissue and pigment; thickened, degenerated pleura; anfractuous cavities with more or less tough walls, obliterated vessels, and air-tubes crossed by bands of thickened tissue: all that remains, in fact, is converted fibrous stroma, without which, strong in its resistance to degenerative and ulcerative processes, there would be no lung left at all. Recognising fibrous change as the character of all chronic inflammatory and tuberculous disease, I cannot therefore teach you from this place that there is an idiopathic fibrosis of the lung, which, from its very beginning, possesses separate and recognisable characters. There are, indeed, cases, which I shall hereafter show you, in which the fibrous becomes the preponderating element; but these have no features which totally separate them from ordinary chronic disease, and will be best treated as varieties with a common origin, and not as a separate class.—*London Lancet*, March 18, 1876.

SALICIN IN RHEUMATISM.

Dr. T. Maclagan has used salicin in rheumatism. He employed it in eight cases, and arrives at the following conclusions:

1. We have in salicin a valuable remedy in the treatment of acute rheumatism.

2. The more acute the case, the more marked the benefit produced.

3. In acute cases, its beneficial action is generally apparent within twenty-four, always within forty-eight, hours of its administration in sufficient dose.

4. Given thus at the commencement of the attack, it seems sometimes to arrest the course of the malady as effectively as quinine cures an ague, or ipecacuanha a dysentery.

5. The relief of pain is always one of the earliest effects produced.

6. In acute cases, relief of pain and a fall of temperature generally occur simultaneously.

7. In subacute cases, the pain is sometimes decidedly relieved before the temperature begins to fall; this is especially the case when, as is frequently observed in those of nervous temperament, the pain is proportionally greater than the abnormal rise of temperature.

8. In chronic rheumatism, salicin sometimes does good where other remedies fail; but it also fails where others do good.

The dose employed was from ten to thirty grains every two, three, or four hours, according to the severity of the case. Fifteen grains every three hours Mr. Pemberton conceives to be a medium dose for an acute case.—*London Lancet.*

CLINICAL LECTURE ON PULMONIC CONSOLIDATION FROM PRESSURE ON A BRONCHUS, ETC.

Delivered in Bellevue Hospital,

BY PROF. A. L. LOOMIS, M.D.

GENTLEMEN: It is not often my privilege to present to you, nor, indeed, is it my fortune to see, many cases similar to the one I now bring before you. The history of the case I will recapitulate briefly. It is as follows: The patient, a man of thirty-five years of age, about three years ago was struck in his left chest by a package weighing two hundred and fifty pounds, which had fallen about fifty feet, and caused an injury at a point a little above the nipple. For ten days after this he was ailing, but after that he was able to attend to his duties of a seaman till four weeks ago, though periodically he suffered from attacks of pain in the chest anteriorly and posteriorly. Four weeks ago he began to spit up blood of a bright-red colour, but not more than a teaspoonful at any one time. The pain about this time increased in severity, but at no time did he have fever till he entered this hospital, one week ago. After admission to hospital he developed fever of a malarial type. He has now a cough, and this cough is not without its importance in a diagnostic point of view, for it is not of the laryngeal variety, not that of pneumonia, pleurisy, or phthisis, but is of a spasmodic kind, such as is heard in cases of membranous bronchitis.

After the patient has coughed for some time, he expectorates a glairy mucus, and at times blood. The temperature on the diseased side is $102\frac{1}{4}$ degrees. When we examine the chest there is no expansion on the left side, nor is there any vocal fremitus. On putting the ear to the chest on that side no respiratory sounds are heard, with the exception of a distant murmur of a harsh character. When we percuss the same side we get a note nearly flat; indeed, it may be considered flat. We thus have the signs of subacute pleurisy, but, when the heart is examined, we find it beating in its proper place, proving that the causes which give rise to the physical signs cannot be fluid. To settle this point absolutely, the needle of an hypodermic syringe was inserted, and no fluid obtained. Now in regard to the diagnosis. We have to consider under what circumstances it is possible to have nearly all of the physical signs of fluid in the pleural cavity, with the exception of displacement of the heart, and yet no fluid. To my mind this can only be accounted for in one way—either a small aneurism, an enlarged gland, or some other agent, has, by pressure, obliterated the calibre of the left bronchus, and as a result we have pulmonic consolidation. Now, this at first seems strange, if not improbable, but when we consider the mechanism of it it will not appear so.

When obstruction of a bronchus, from any cause, takes place, there follows partial or complete collapse of the air vesicles beyond; with the collapse of the vesicle there is a diminished pressure on the capillary vessels, resulting in their dilatation and increased supply of blood to the vesicle. Now, in accordance with a well-known pathological law, rapid cell-formation takes place, distending the lobule to its normal size, and giving us a condition closely resembling the third stage of catarrhal pnuemonia.

I have seen three cases in which autopsies proved the result of the morbid process which I have described, and in all of them the cause of the pressure on the bronchus was due to an aneurism. When we listen closely to the posterior part of the chest near the scapula, we hear the heart-sounds distinct, and we hear also an indistinct bruit synchronous with the systole of the heart. While it is not improbable that this bruit may be caused by a small aneurism, we are not justified, so far, in making a positive diagnosis, though we may be justified in suspecting it. You may recollect that the patient spat up some blood occasionally, and you may be puzzled to know where it came from. I think it came from that part of the bronchus which is subjected to pressure, for continuous pressure at any given point along the line of a large bronchus would readily account for it.

In regard to the element of fever, which has been present in this case, we are justified in considering it to be due to malaria, for the reason that he has been sufficiently long under observation to come to a decision on the matter.

It may be, before the session is over, that additional developements will take place to render our diagnosis more positive.—*New York Medical Journal.*

HEADACHES OF THE DECLINE OF LIFE.

S. Weir Mitchell, M.D., of Philadelphia, contributes the following to the Medical and Surgical Reporter: "These cephalagias are for me always full of suspicion. If a person who has been free of headaches begins late in middle life to have them, the case is usually one which will need every care we can give it. In such cases, after excluding the eyes as a cause, it is most needful to make sure that the headache be not remotely due to albuminuria from contracted kidneys. In an article in the Philadelphia Medical Times for August, 1874, on the nervous accidents of albuminuria I have already spoken of this matter, and have there given three cases of headache, in all of which albuminuria was the unsuspected parent of the pain. But after putting aside these and the still more common causes of headaches, as gastric disorder and the constipation of old age, there yet remain headaches which have often, I think, some relation to causes which in the old produce hemiplegia. These headaches are apt to occur on one side of the head, or to be most felt on one side when even the whole heah aches. They are liable to be attended by a sense of fullness and by throbbing, and they are extremely apt to be felt every morning on awakening from sleep. Headache is one of the near prodromes of hemiplegia, according to the books, but in my experience it is not a common one; while as a more remote warning it has value, but still not very frequent. I have hesitated in these brief clinical sketches to speculate much on the causes of symptoms, nor do I see my way here to say what it is in the state of a head with degenerating vessels which gives rise to pain; yet, practically speaking, I am sure of the fact. I every now and then meet a man who has headache and slight numbness on one side, and who may or may not have had a slight hemiplegia. I bleed this man by leeches a few ounces. I am perfectly sure he will be free of pain and eased of numbness for some time to come. I take the blood from the temple and from the back of the ear on the worst side. The immediate connection in these regions with the brain-breeding vascular areas beneath them is clear and abundant, and it does seem as if the local depletion eased a local overplus, and that the distended vessels did not give way anew for some time to come; but this is a speculation merely, while the valuable fact as to the use of leeching rests unchanged, however we explain or do not explain it. Hard, too, to fully comprehend is the other fact, as to which I am quite as sure, that in a florid man well on in the fifties or over them, with a strong heart, throbbing headaches, and hints of hemiplegia in the way of unilateral numbness or tingling, the leech is made of longer use and even of permanent value by restricting the diet to vegetables, milk, and fruit. I could easily quote case on case in support of these assertions, but one shall answer: A stout, somewhat ruddy gentleman, aged sixty-one years, from Delaware, called on me two years ago with the following symptoms: a strong pulse and heart-beat; slightly beaded radial arteries; a faint senile arc; large, tortuous, visibly full temporal arteries; an occasional increasing numbness of the left side, ending in a slight hemiplegia, two years ago, but before this and since he had daily headache on awakening, and of late attacks of dull, throbbing ache, not worse on one side, but when present nearly always accompanied by a sensible over-action of the heart and by increased left-side numbness. Cardiac sedatives and purgatives aided him none, but a full leeching gave immense relief. In three weeks it had to be done again, and in two months yet again; then I urged absolute deprivation of meat, and that has succeeded, so that only once since has he been leeched. Tobacco had something to do with the first of his headaches and was at least potent in ability to bring one on when used in excess. At last he learned this, and ceased to smoke as much, which presently lessened the number of attacks, but did not prevent them altogether. At last he acquired curious cardiac sensitiveness to tobacco which grows on some old smokers, and he was forced to abandon it. Nevertheless the head-aches remained. There is one most remarkable fact in this history of neuralgic headache (megrim): it is very apt to cease as men grow old, but also it is apt to disappear and return no more in those who have had a single hemiplegia attack however slight. I find in my note-books seven causes of hemiplegia, three right and four left, in which are noted this most interesting peculiarity."—*Louisville Med. News.*

THE INOCULABILITY OF DIPHTHERIA.

Until a comparatively recent period it has been generally considered that diphtheria could not be inoculated directly, either in man or the lower animals. This view, however, must be allowed to have been somewhat contradictory to the well-known fact of the conveyance of the contagion of diphtheria by means of pieces of false membrane, and to such cases as those of Professor Valleix of Herpin and Gendron in France, and other similar cases in England. The belief was grounded on the negative results of some experiments on himself by Trousseau, and also more especially by Peter. The results of these experiments seem to have been accepted far too readily as evidence of non-inoculability of this disease. It should be borne in mind that a large number of experiments under varied conditions must all equally lead to a negative result before a belief in the non-occurrence of any given result can rightly be entertained; and even then a single positive result outweighs all the negative ones. In fact, the experiments of Trousseau and Peter were quite inconclusive. Trousseau dipped a lancet into some false membrane recently expectorated, and made punctures with it on his arm and on the velum palati. Peter made three experiments: in the first he allowed a small piece of false membrane, coughed up during tracheotomy, which lodged in his eye, to remain there without attempting to wash it out; in the second he scraped his soft palate and tonsils with a pair of pincers in which was held a piece of false membrane recently coughed up; and in the third, he inoculated a puncture of the mucous membrane of his lower lip with diphtheritic exudation. Of these somewhat foolhardy experiments only two can be considered as at all likely to have succeeded, and it is scarcely necessary to observe that scores of similar cases of escape from apparently certain infection with animal poisons might be cited, which yet only prove that there is a possibility of failure in the experiment. On the other hand, there is now abundant evidence that diphtheria can be inoculated, even in the lower animals. Thus Trendelenburg made experiments on pigeons and rabbits during an epidemic, and succeeded, in 11 out of 68 experiments, in producing diphtheritic false membranes in the larynx by placing in it pieces of recent exudation. Oertel even states that he has succeeded in nearly every case in inoculating rabbits; but in many cases blood-poisoning, rather than true diphtheria, seems to have been produced. Some experiments have recently been made on rabbits by Dr. Gabriel Duchamp. From his results he concludes that the false membrane, when placed in the larynx and trachea of the rabbit, may give rise to a true diphtheritic process, whilst, in the absence of false membranes, the other products from the human larynx in a case of diphtheria did not appear to give rise to it, although they were very poisonous. The injection of diphtheritic exudation suspended in water into the subcutaneous cellular tissue, or into the jugular vein, gave rise either to no results or to septicæmia or pyæmia; and inoculations of the skin with false membrane were equally without result both in the rabbit and the horse. The number of experiments was, however, too limited to allow of our accepting these negative conclusions in an absolute manner. The subject is one of considerable importance, from its bearing on the mode of conveyance of the contagion of diphtheria; so far as experiments go at present, they would seem to show that the primary contagion is local, and that its effect depends on the existence of certain conditions of the mucous or other surfaces favourable to its reception, which is entirely in accordance with clinical experience. The existence or non-existence of fungus in the false membranes, and its dependence upon their presence is, it need hardly be said, an entirely different question.—*London Lancet.*

Dr. Warburton Begbie, of Edinburgh, is dead. This distinguished physician had the largest consulting practice out of London. His father was a consultant of the first rank, and young Begbie, as Warburton was commonly and formally termed, commenced life under most favourable circumstances. He was a very popular man, and his knowledge of his profession was excelled only by his urbanity.

CHANGE OF CLIMATE IN CONSUMPTION.

In the *British Medical Journal*, Dr. C. Theodore Williams puts and answers these questions:—

1. What cases are most benefited by sea voyages?

2. What ones by dry climates?

3. Are moist climates beneficial?

1. The cases which I have seen do best are, first, cases of hemorrhagic phthisis; second, cases of limited consolidation with no pyrexia, occurring in young men overworked at in door occupations, and who have suffered from the septic influences of life in great cities, such as clerks, shopmen, secretaries, and the like. This form of treatment is far better suited for men than women.

2. As to the second query, as to what class of patients profit most by dry climates, it has been shown that, taking collectively all forms and degrees of phthisis, the dry climates are the most likely to arrest the disease; and also that a dry and moderately warm climate, like that of Southern Europe, is most successful in the treatment of consumption of inflammatory origin. The question whether a cold dry or a warm dry atmosphere is the best for ordinary chronic phthisis, depends, to a great extent, on the individual's power of maintaining circulation and temperature. When these suffice, the cold climates are preferable; but in the majority, and especially for women, whose circulation is weaker, the warm and dry are the best, for they are thus enabled to live more in the open air. Elevation is of some importance; and I should always choose a mild climate with elevation than one without it. Mountain air is not beneficial solely on account of its purity, for on this point sea and desert air may vie with it; there is another factor in the low barometric pressure and atmosphere rarefaction, and the expansion of the lungs thereby caused may be of great value in chronic first stage cases. At present, the trial of mountain climates must depend on the supply of suitable accommodation and food for invalids. If in the Andes sanitaria these articles were of a nature fit to offer to our comfort-loving British consumptives, I would not hesitate, after the evidence of Archibald Smith, Walshe, and others, to recommend them, as some can also boast of a warm winter temperature; but, alas! those who repair thither at present must be content with Spanish habits, Spanish food, and an unsettled government. The Alpine elevated sanitaria do not, according to my experience, supply in winter sufficiently good food for British consumptives; and, although they attract crowds of German and Swiss, they must not expect our countrymen in equal numbers until they feed them properly.

3. As to the desirability of moist climates for consumptive patients, the evidence is decidedly against their use in the treatment of ordinary chronic phthisis. The addition of warmth only makes the damp tell more unfavorably, though a strong saline element and invigorating breezes do something to counteract the humid influence; still, even these do not place a moist climate on the same level as a dry one. There is one exception, however. Phthisis, of catarrhal origin has been shown to profit most by a warm and equable climate, even though accompanied by a certain amount of moisture, as the evidence of Madeira witnesses.

Finally, in all climate questions, full note must be taken of the patient's inclinations, means, and, above all, of his disposition and temperament; and exile must not be decreed to those who are incapable of making themselves happy under the changed conditions of life, or all our scientific grounds for a climate decision may collapse like a house of cards.—*Medical and Surgical Reporter.*

Dr. Flint in his last work on phthisis states that he has found whiskey in free quantity, combined with plenty of fresh air, in some cases yield remarkable results; he also repeats an important statement respecting alcohol, which he has elsewhere insisted upon, viz., that "among the great number of cases of phthisis in which he has advised alcoholics to be taken as a therapeutical measure, he has never known a single instance of a patient becoming addicted to their use."

SMALL POX CONVEYED FROM INDIANA TO CALIFORNIA BY LETTER.

Our readers will be interested in the following letter, written by Dr. Thomas Ross, of Woodland, Yolo Co., Cal., to Dr. Cluness of Sacramento, and forwarded to us by the latter gentleman with the consent of Dr. Ross :

WOODLAND, Jan., 24, 1876.

A very peculiar and interesting case illustrating the subtlety and power of the small pox contagion has occurred in the practice of our mutual friend Dr. Markell.

Mr. Dutton, tinsmith, residing in Cacheville, Yolo Co., received a letter from his sister residing in Indiana, informing him that she, her husband, and their three children had small pox, and that she feared that the babe would die. Here she stopped writing, and on the next day resumed, stating that their babe died of small pox. This letter Mr. Dutton received on the 14th or 15th of Dec. last, and on Dec. 27th took sick with a train of symptoms which Dr. Markell regarded as a bilious attack, and as he was a friend of the Doctor's and was in a cold room, Markell took him to his house, supposing he would be well in a few days. But on the 31st an eruption appeared on the face, then on the other portions of the surface, which at this date, (Jan. 4th) has developed into a well marked case of discrete variola. Markell states that there is no doubt of the accuracy of his diagnosis, as the eruption presented the characteristic umbilicated appearance of the pustules, and you see that the course of the disease is regular, the period of incubation being ten or twelve days, the time elapsing between the receipt of the letter and the time the man took sick. There is no small pox in the neighbourhood or in the county, and Dutton has not been out of Cacheville for a year, and no other source of contagion can be traced. The people there are very much alarmed, and some families have moved off—such is their dread of the disease. They of course avoid Dr. Markell, whose business is destroyed for the time being.—*Pacific Med. and Surg. Journal.*

THE survivors of the British Medical Corps of Waterloo are now two in number.

TYPHOID FEVER IN A CHILD WITH RUPTURE OF THE SPLEEN.

Dr. Wittman, from observations in the Children's Hospital at Pesth, declares that in all cases of typhoid in which hemorrhage from the bowels occurred, it was preceded for a few days by slight hemorrhages from the mucous membrane of the mouth and gums. He gives the history of a well marked case of typhoid in a boy of ten, admitted to the hospital Dec. 29th, with the history that he had been seriously sick for five days. The temperament ranged between 104° and 106° F., the pulse from 120 to 132 ; there was delirium at night, slight bleeding from the lips and gums appearing on the 30th. The cold water treatment was not used, because a little girl, on whom it had been used under similar circumstances a few days before, had died of hemorrhage from the bowels. On Jan. 2nd, however, delirium increasing, he was put in a wet pack. The next day there was sensitiveness over the region of the spleen, and the bleeding from the mouth continued in spite of various modes of treatment. On Jan. 5th the stools contained blood, and he fell into a state of collapse and died, the temperature falling from 104° to 97.2° F., during the last six hours. At the autopsy, an ulcer, with hemorrhagic appearance of base and edges, and half an inch wide, was found in the posterior wall of the pharynx, between the orifices of the Eustachian tubes. The stomach and intestines contained altered blood ; the Peyerian patches were the seat of the characteristic lesions of the disease, and the peritoneal cavity contained about a pound and a half of dark fluid blood. The source of this was found in the spleen, which organ was enlarged to four times its natural size and was the seat of two long and deep lacerations or ruptures, one of them two and a half inches long and an inch deep.—Jahrb. F. Kinderbeilk. —*N. Y. Med. Record.*

Professor John Morgan, F. R. C. S. I., Professor of Anatomy in the Royal College of Surgeons, Ireland, died suddenly, of enteric fever, March 4th. He was born in 1829.

Diagnosis of Empyema.—A new method of differentiating between serous and purulent effusions in the pleura, "founded on a physical law,—namely, that the vibrations of sound in liquids are transmitted *inversely* to their density," has been proposed by Prof. Guido Baccelli, of Rome. "In a serous liquid, therefore, the sound passes more readily than in a purulent; and it is found that whereas the whispered voice (la parola aforcieamente syllabata) can be heard clearly, accompanied with bronchial expiration, at the base of a *serous* effusion, the spoken voice is not transmitted nor bronchial breathing heard over a purulent exudation. Immediate auscultation must be employed, the naked ear being pressed firmly against the chest, and the other closed against the entrance of extraneous sounds by pressure with the finger." A mixed effusion—*i.e.*, one consisting "of a serous exudation, in which flakes of fibrine and a moderate amount of leucocytes are contained," may be recognised in the same way, since the fibrine and leucocytes "by their subsidence" to the bottom, "prevent the passage of the whispered voice over the area which they occupy."

The Treatment of Rheumatic Arthritis with Salicylic Acid (Stricker: *Berliner Klin. Wochenshrift*, Nos. 1 and 2, 1876).—All cases of articular rheumatism which have presented themselves at Traube's clinic for some months, in whom the local affections were marked, have been treated with salicylic acid. The pure pulverized acid was given in doses of 0.5-1.00, and the patient in no instance took less than 5.0 or more than 15 grms. daily. The results which were attained were surprising, for all the patients after the lapse of forty-eight hours (the majority of them much sooner) were freed not only from increase of bodily temperature, but also what is of much more importance, from all local symptoms.

These observations were fourteen in number, and Stricker regards salicylic acid as the most active and perhaps almost a specific remedy for acute articular rheumatism.

Dr. Parkes, the author of the most elaborate work on Hygiene in the language, died of chronic pneumonia, March 15, 1876.

The Inoculability of Relapsing Fever.—Dr. Motschutkoffsky, of Odessa, has been experimenting for several years with inoculations upon man and animals with the matter of typhus, typhoid, and relapsing fever, and was successful in the case of the last disease only, and in the human subject. He succeeded only by the use of the blood, taken during a paroxysm of fever, and it made no difference whether it contained spirilla or not. The disease thus induced differed in no respect whatever from that due to other causes, nor was any other form of fever ever developed from inoculations of the blood of relapsing fever. The period of inoculation was between five and eight days. Blood kept hermetically sealed for two days in a capillary tube yielded positive results, as did also blood diluted in equal parts with a watery one per cent. solution muriate of quinine, but when diluted with the one-tenth part of spirit the results were negative.—*N. Y. Medical Record.*

A Simple Means of Arresting Obstinate Epistaxis, Rebellious to all Treatment.—An abundant epistaxis resisted all the means usually resorted to for arresting such hemorrhages—mustard foot-baths, cold, ice to the nucha, plugging to the nasal orifices, elevation of the arms, injection of the perchloride of iron, as practised by my freind M. Crequy, ect. If the patient be not already enfeebled, fainting spells will soon come on if the hemorrhage continue. What is to be done? A simple means has frequently succeeded in my hands. A light emetic, quickly administered, soon provokes nausea, then vomiting, and hemorrhage is incontinently arrested.

This plan of treatment has proved very successful this summer during the great heats.—[*Trib. Medical. Dr. G—.*

A Mother's Milk Poisoned by Opium.—The *Medical Press* says that a coroner's jury in Manchester, Eng., rendered the verdict in the case of a child two days old, "Found dead from the effects of opium poison through the mother's milk." The mother had been used to taking an ounce of opium in a week.

Surgery.

CLINICAL LECTURES ON LISTER'S TREATMENT OF WOUNDS AND ABSCESSES BY ANTISEPTIC METHOD.

BY THOMAS SMITH, F.R.C.S.,
Surgeon to St. Bartholomew's Hospital.

LECTURE I.

GENTLEMEN,—As many of you are aware, I am endeavouring at the present time, with Mr. Vernon's assistance, to carry out Mr. Lister's method of treating wounds antiseptically, and as some of you may be interested in the result, I propose in this lecture to explain as briefly as I can the theory upon which Lister's antiseptic treatment is based, the facts from which that theory is adduced, and the advantages Mr. Lister claims for the plan.

I shall not at present give the results of my experience, nor shall I now express any opinion as to the merits or demerits of this treatment. I would rather wait until a fuller experience justifies me in speaking with some authority.

In taking up a subject of this kind it is very difficult to avoid a spirit of partisanship, since on the one side there are surgeons whose opinion is entitled to respect who are opposed to the system, either on *à priori* grounds or in consequence of an unfavorable experience of its results; and on the other side are ranged those who have come to an opposite conclusion, and mostly after having put the plan to a practical test.

Under existing circumstances I would advise you to form your own independent opinions from your own observation of results. I intend to do so, and I propose to give the plan at least one year's trial, employing the treatment especially in what may be called test cases; I mean in cases where the antiseptic method is fairly put on its trial, and where an opportunity occurs for such advantages as it is said to possess to become plainly apparent.

There are two preliminary conditions which Mr. Lister has a right to demand of those who profess to make trial of his system: first, that they should at least provisionally accept his theory; secondly, that they should know what his practice is, and should carry it out even to the minutest particular. They must provisionally accept the theory, or the details of the practice will in some respects appear so frivolous that they are sure to be occasionally neglected; while if the soundness of the theory be accepted, it will be seen that the observance of these details is thoroughly reasonable. Mr. Lister has a right to insist that those who profess to give his practice a fair trial should observe its minutest details, since no one can be truly said to carry our Lister's plan who stops short in the execution of details prescribed by the author as necessary to success.

Now, in order to fulfil the first condition, I have, for the present at least, agreed to accept Mr. Lister's theory (what it is I will tell you directly.) And lest I should fail in the second through a want of knowledge, I visited Edinburgh myself last summer, and had the advantage of personal instruction from Mr. Lister himself; and subsequently my house-surgeon, Mr. Vernon, was good enough to stay there for a time, when both Mr. Lister and Mr. Annandale gave him every opportunity of learning the practice of antiseptic surgery. These gentlemen not only succeeded in teaching Mr. Vernon the details of their treatment, but happily fired him with the enthusiam necessary to carry them out with a good will on his return to London. Whatever may be the result of antiseptic surgery in my wards, I shall remain very much indebted to Mr. Lister, Mr. Annandale, and Mr. Vernon.

The theory, or, one may now say, the facts on which Mr. Lister's antiseptic treatment rests are as follows:—

1st. That in the dust of the atmosphere, and on matter with which it is in contact, there are the germs of minute organisms which, under favourable circumstances, induce putrefaction in fluids and solids capable of that change, in the same manner as the yeast-plant occasions the alcoholic fermentation in a saccharine solution.

2nd. That putrefaction is not occasioned by the chemical action of oxygen or any other gas, but by the fermentative agency of these organisms.

3rd. That the vitality or potency of the germs can be destroyed by heat, and by various chemi-

cal substances, which we call, in surgery, "antiseptics."

Now, I am not going to ask you to believe these statements on my authority, but I will shortly refer to the results of experiments performed by Pasteur, Lister, Sanderson, Tyndall, and others, which justify the above conclusions.

It is scarcely necessary to state that organic fluids, like milk, urine, and blood, infusion of meat, &c., if kept in contact with the air at ordinary temperatures, will ere long decompose or putrefy, and will give evidence of putrefaction by turbidity (if the fluid be originally clear), by the evolution of offensive gases, and by the development within them of bacteria.

Again, I need do no more than remind you that prolonged boiling will not of itself preserve such fluids from putrefaction. Yet any of these or similar fluids may be kept free from putrefaction for an indefinite time, in spite of free access of the atmospheric gases, provided that the fluid has been boiled at the outset to destroy any organisms in it, and that the dust of the air is excluded. The exclusion of the dust may be effected in various ways. In some of Pasteur's first experiments it was done by having the neck of the flask which contained the liquid drawn out by aid of heat into a fine tube bent at various angles, in which form, though open at the end, and allowing perpetual entrance and exit of air, it arrested all particles suspended in it, and the urine or other fluid which was the subject of experiment remained permanently unaltered. Or, again, the same object may be attained by having the mouth of the flask plugged with a mass of purified cotton-wool, which effectually filters of its dust the air that enters the vessel in consequence of the condensation which alternates with expansion in the diurnal changes of temperature. But if the neck of the flask is broken short in Pasteur's experiment, or the plug of cotton-wool removed, organisms are sure to show themselves before many days have passed. Even more striking is the method adopted by Mr. Lister, who decants the boiled organic liquids into wine-glasses purified by heat, and each covered with a glass cap similarly purified, and a glass shade, scrupulous care being taken to avoid the entrance of dust during the process of decanting. Neither cap nor shade fits closely, so that a constant interchange takes place between the external air and that in the wine-glass, yet the double protection afforded by the cap and shade effectually excludes dust, and the result is, that although the organic fluids gradually diminish in bulk by evaporation, and in the course of months dry up altogether, no organisms make their appearance from first to last, nor does putrefaction or any other fermentative change occur. If, however, the glass shade and cap are removed for a few minutes and replaced, fungi or bacteria soon show themselves. But he has found that if the glass cap be only lifted for a second or two in an ordinary apartment free of draughts there is practically no risk of the entrance of any organism in the short period of exposure.

Further, it has been shown by Pasteur and other observers that it is by no means essential to the success of such experiments that the organic liquids should be boiled, but that when circumstances admit of their being withdrawn uncontaminated from their natural receptacles, such as the urinary bladder, the blood-vessels, the udder of the cow, or the shell of a fresh-laid egg, they will remain free from organisms and from putrefaction when kept in pure vessels and protected from dust.

It has also been discovered that impure air will purify itself by mere subsidence of its dust. Pasteur long ago proved that putrescible fluids could be kept free from putrefaction in air taken from cellars free from draughts, when the solid particles of the atmosphere had had time to deposit themselves by subsidence; and Prof. Tyndall has recently subjected air purified by being kept at rest to very searching tests to ascertain if it will excite putrefaction in putrescible solutions. He has found that solutions of meat, cheese, turnip, &c., first subjected to a high temperature, can be kept free from putrefaction for an indefinite time exposed to the air-closed boxes that have been kept at rest a day or two, to allow the dust to subside, precautions being taken to prevent the said dust rising again, by coating the inside of the box with glycerine. The same experimenter has demonstrated the fact that the air which has been thus rendered incapable of exciting putrefaction—*i.e.*, aseptic

—is also optically pure : that is, that there are no particles or motes to be detected in it when illuminated by a beam of electric light in a darkened room.

I think, then, we are justified in concluding that in the dust of the atmosphere there *are* such things as fermentative particles, organisms, germs, or whatever you like to call them, and that these, under favourable circumstances, induce putrefaction in fluids and solids capable of the process; that without these germs putrefaction and the formation of bacteria does not take place; and, finally, that these germs can be destroyed or removed from the atmosphere by the various means that I have above described.

Let me here remark, as having an important bearing upon Mr. Lister's practice, that in the case of any of those fluids that have been kept free from putrefaction by any of the above described means, the addition of the smallest drop of ordinary water, or the contact of a glass rod that has not been specially treated to render it aseptic, will almost certainly excite putrefaction, though all other prescribed conditions are scrupulously carried out to prevent its occurrence.

On the other hand Mr. Lister has found that when any portion of apparatus used in investigations on this subject cannot conveniently be purified by heat, the object may be attained by washing the glass or other material with a strong watery solution of carbolic acid, and drying it with a carbolised rag, and in the course of a long series of experiments he has invariably found this antiseptic agent as efficacious as the flame of a spirit-lamp in preventing the growth of organisms and the occurrence of putrefaction.

Mr. Lister's object in the treatment of wounds and abscesses is to exclude from them these germs or organisms that float in the atmosphere and are the causes of putrefaction, and the means he employs for effecting this purpose he recommends, not as the best that can be used, but as the best that he has been able up to the present time to devise; and although Mr. Lister considers the truth of his theory incontrovertible, yet he does not claim to have brought his practice to perfection.

Mr. Lister claims for his plan that when it can be carried out with due care and proper observance of details, he can, as a rule, secure that an open wound should heal after the manner of a subcutaneous injury—that is, without inflammation or constitutional fever, and for the most part without suppuration; while, if suppuration occurs, he secures that it shall not be putrefactive—that is, accompanied by the changes that we consider evidences of putrefaction, such as the formation of bacteria and the evolution of fetid gases.*

In the treatment of abscesses by the antiseptic method, Mr. Lister believes that he has effected an entire revolution in the course of the disease after the cavity has been opened, and to this I will more particularly allude in my next lecture. But I may here mention that, along with many local advantages, the patient is said to be free from all danger of irritative fever as the immediate consequence, and from hectic at a later stage.

I said that these advantages are claimed for the antiseptic method when it can be carried out with due care and a proper observance of details—that is to say, in cases where the surgeon himself inflicts the wound on an unbroken skin; for in this case he can protect the part against the entrance of putrefactive ferments, whereas when sinuses have formed, or when a wound has been some time exposed to the air, abundant sources of putrefaction already exist in the wound or abscess; nor is there at present any means by which, under these conditions, they can with certainty be all destroyed. You can thus understand how it is that Mr. Lister considers himself sure of success where he applies his treatment to an abscess which he himself opens, or to a wound he has made, and that he would generally expect success when dealing with a recent compound fracture or wound into a joint; whereas he would scarcely be disappointed at a failure if he applied his treatment to a case where sinuses already existed, or where an open wound had long been exposed to the air.

* The local advantages, if secured in individual cases, must of course affect the general salubrity of a hospital. On this subject see The Effect of the Antiseptic Treatment on the General Salubrity of Surgical Hospitals, by J. Lister, F.R.S., Brit. Med. Jour., 1875, vol. ii., pp. 769.

I must state these things explicitly to you in justice to Mr. Lister, that you may judge fairly of the results of the antiseptic treatment, understanding what it cannot do, as well as knowing the advantages claimed for it by its author. It is also only just to Mr. Lister, and essential, in order to enable you to form a fair estimate of the results of his method, to remember that he is far from regarding putrefaction as the only cause of suppuration. On the contrary, he has long since pointed out that any antiseptic substance, such as carbolic acid, if applid continuously to the exposed tissues of a wound, stimulates them to granulation, and the granulations to the formation of pus, giving rise to what he has termed "antiseptic suppuration," due to the direct chemical stimulus of the antiseptic. He has also expressed the belief that putrefaction acts in a precisely similar manner in causing suppuration, the products of putrefaction being acrid chemical substances; but that there is this all-important difference between the two cases —that the antiseptic acts only on the part to which it is applied, whereas putrefaction, being a fermentation, extends itself into all the recesses of a wound or abscess, where blood or sloughs, pus or serum, affords a nidus for the development of the bacteria. Further, Mr. Lister has directed attention to the important truth that suppuration, besides being brought about in this manner by the direct stimulus of chemical irritants, may be produced by ordinary inflammation without the access of any external disturbance, putrefactive or otherwise, as in the familiar case of an ordinary deep-seated abscess, the contents of which when evacuated are free from putrefaction. This ordinary inflammation he believes to be due to excited nervous action, and the commonest of all causes of it in surgical practice is tension, occasioned by blood or serum being pent up within the cavity of a wound; and he has insisted upon the fact that, in consequence of the irritating influence of the antiseptic material in the spray and sponges, the sanguineo-serous discharge is greater in the earlier periods from a wound treated antiseptically than from one managed in the ordinary way. Hence it is doubly necessary to provide free escape for this serous effusion, which is done by means of drainage-tubes; and if these be neglected or inadequate, tension will inevitably result, with corresponding inflammation, and in due time suppuration. Lastly, we must bear in mind that inflammation caused in this manner by tension, like any other ordinary inflammation, will be attended in proportion to its intensity by constitutional disturbance or fever.

If, therefore, we see suppuration make its appearance, or inflammatory disturbance and febrile excitement, in any case treated antiseptically, we need not necessarily infer that the antiseptic method is at fault until we have seen if we can discover some cause, other than putrefactive, which may account for the phenomena.

It will be obvious to those of you who have followed me thus far, that though all that I have stated may be absolutely true in theory, and though Mr. Lister's practice may be thoroughly sound in a chemical sense, yet pathologically it may be unsound. I mean that the antiseptic treatment may succeed in preventing the occurrence of putrefaction and the development of bacteria in wounds and open abscesses, yet this freedom from putrefaction does not necessarily imply an absence of local inflammation and constitutional irritation. Now this is what I want you especially to observe for yourselves; first, if the secretions of wounds and abscesses treated antiseptically are free from putrefaction; and secondly, if, together with this absence of decomposition, you have an absence of local inflammation and constitutional fever—other sources of these conditions being excluded.

That you may judge of these things the better and more certainly, I use the antiseptic method to those cases which, under ordinary treatment, are specially liable to local manifestations of inflammation, and are generally the sources of well-marked constitutional disturbance. I have not used the plan in ordinary amputations, removals of the breast, tumours, operations for hernia, nor in the treatment of acute superficial abscesses, for in these the result of surgery in a healthy hospital is usually satisfactory; but in resections of large joints, in wounds of joints and compound fractures, in deep abscesses, and especially in chronic abscesses connected with joint disease or caries of bone.

In judging of the results of the antiseptic treatment in our hands, I must beg you to bear

in mind the facts which were published by Prof. Tyndall in January last. I must ask you to observe that even in the chemical labratory there are difficulties to be overcome and minute details to be observed in order to obtain uniform results; and that, even in the hands of masters of the art, notwithstanding all care, sources of error will sometimes occur, and a fallacious result be obtained. Now, if this be the case under the circumstancees I have referred to, how much more difficult must it be to carry out the necessary details when beginners like ourselves are dealing with the living tissues of the human body.—*Loudon Lancet.*

ON THE MORE COMMON FORMS OF ENLARGEMENT OF THE LYMPHATIC GLANDS.

BY J. WARRINGTON HAWARD, F.R.C.S.,

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It has been so much the custom to regard enlargement of the lymphatic glands as the special characteristic of scrofula, that many glandular swellings, having no relation whatever to that disease, are frequently classed and treated as scrofulous. This is especially the case with regard to swellings of the cervical or submaxillary glands; yet it is certain that the majority of these enlargements are of a local and not of a constitutional character. The epithet "scrofulous" is, in fact, often applied very loosely, and seems sometimes to be used rather as implying some mysterious influence or peculiarity, than as indicating that a person is affected by a definite disease. Yet the symptoms of scrofula are sufficiently well defined, and enlargement of the lymphatic glands is but one, and that not a constant one, of these; and it is no more reasonable to call a child scrofulous because it has enlarged or even caseous cervical glands than it is to apply the term to a chronic inflammation of a joint in an otherwise perfectly healthy child, or than it would be to call a person syphilitic, because he had a periostitis of his tibia. An examination of any considerable number of cases of enlargement of the superficial lymphatic glands, will show the majority of these to have a local origin. The glands most often seen swollen are the cervical and submaxillary, and the greater number of such swellings depend upon inflammation of the scalp or gums. Slight cases of eczema, or impetigo capitis are exceedingly common in children, and are very frequently the cause of enlarged cervical glands; but the eruption being but trifling is often overlooked, and the surgeon's attention asked only to the condition of the glands. So also inflammation of the gums, during teething, stomatitis, ulceration of the throat, and disease of the middle ear, may give rise to swellings of the associated lymphatic glands. Glands affected in this way may attain a considerable size, but as a rule will recover their natural condition on the removal of the irritation. Usually several glands are affected; they are not distinctly isolable from the surrounding cellular tissue, nor are they freely movable; they are, moreover, painful and tender; sometimes they suppurate. A peculiarly acute and painful inflammation of the posterior cervical lymphatic glands is occasionally seen in connection with scalp wounds; this usually runs a rapid course, and subsides without the formation of matter. Doubtless if any of the above-named irritations occur in a scrofulous person, the glandular enlargement is prone to show an increase and a persistence, out of proportion to the severity or duration of the exciting cause, and thus it may pass on to caseation or necrosis; but this is by no means necessarily the case, for the lymphatic vulnerability varies greatly in scrofulous persons. Caseation must not be looked upon as the distinctive mark of scrofula, for almost any chronic enlargemant of a lymphatic gland may result in caseation, and certainly this process may occur in an otherwise perfectly healthy subject. A single caseous, and in some parts cretaceous, gland was removed five years since from the neck of a boy who was the picture of robust health, and who I know remains so at the present time, and has never shown the slightest trace of scrofula.

Inflammation and chronic disease of a joint will cause indolent swelling of the associated lymphatic glands; and this in persons who are not in the least degree scrofulous. One of the earliest symptoms of disease of the hip-joint is

often a slightly painful enlargement of the inguinal glands, and there are few cases of hip disease in which some swelling of the glands is not found In disease of the cervical spine also, swelling of the posterior cervical glands often occurs, and it is important to remember that the stiffness of the neck in such cases may depend, not upon the painful glands, but upon the joint disease. The glands do not increase very greatly in size, but will remain for months swollen to about the size of filberts, and slightly tender to the touch; and as the joint disease subsides, they regain their normal condition; excepting the tenderness, they precisely resemble amygdaloid glands of syphilis. In many robust persons this condition of inguinal or axillary glands ensues upon any severe exercise of the arms or legs, such as rowing, or prolonged walking, and seems to be quite unassociated with any delicacy or weakness of constitution.

The true scrofulous disease of the lymphatic glands is a slow and almost painless enlargement, usually of the superficial glands, and most commonly affecting those of the groin or neck. It commences simultaneously in several glands; they are at first soft, and surrounded by a little cellular swelling, so that the shape of the gland is not very well defined. As the enlargement increases the glands become firmer and more defined, in this respect differing markedly from Hodgkin's disease, in which, by their growth, the glands become fused together. In the course of time caseation ensues, and goes on either to cretefaction or to softening and abscess. Suppuration is much more rarely seen in the deeply situated, than in the superficial glands; and when it does occur, takes place slowly and with scarcely any pain; there is but little disposition to pointing, and the matter is ill-formed and mixed with caseous débris. The skin thus often becomes extensively undermined and ulcerated, and thus result the unsightly scars and puckerings so often seen in scrofulous persons. An examination of a scrofulous gland reveals a general hypertrophy, with close packing of the cellular elements, leading, by a compression of its blood-vessels, to an anæmia, and consequent want of nutrition of its tissues. Fatty change soon ensues, and a subsidence of the swelling may take place; but usually the degenerated tissues either break down into cheesy material which eventually becomes calcareous; or suppuration takes place, accompanied by some little surrounding inflammation. Even if suppuration has occurred the abscess may not open, but may dry up, leaving only a little caseous matter unabsorbed; but this is very prone to become the seat of residual abscess, and thus to cause subsequent trouble; so that an abscess having once formed, its evacuation is to be desired.

The *treatment* of lymphatic glandular swellings must of course depend upon the diagnosis. The simple enlargements depending upon neighbouring irritation will, if left alone, subside upon the removal of their cause. I say, *if left alone,* for if the skin over them is irritated by the application of iodine, poultices, or blisters, they may be provoked, as one so often sees, into still further enlargement, or even suppuration. Nothing in therapeutics is more curious than the way in which some practitioners paint tincture of iodine over every imaginable kind of swelling; to some minds the mere existence of a tumor, seems at once to suggest the local application of iodine, and to these, painting with iodine seems their refuge in all cases of doubtful diagnosis, as though changing the colour of the skin were supposed to affect the character of the growth beneath it. Unfortunately the staining is not the only harm done by such applications, for they inflame the skin and thus keep up or increase the glandular irritation for the cure of which they are used, or render the parts unfit, for a time, for necessary operative treatment. An acute swelling of a single lymphatic gland may be sometimes rapidly cured by puncture. A narrow thin knife should be thrust into the centre of the gland and withdrawn, and the part then covered with a piece of cotton wool; the pain and swelling at once and quickly subside.

Single caseous or cretaceous glands, in healthy persons should be removed if their position does not render the operation dangerous; when superficial, they are easily turned out, and the scar left is very slight. Gland-swelling in connection with diseased joints are of course an indication for rest. I have seen one case of hip

disease, in which there was reason to believe that the joint affection was the result of suppuration spreading from the inguinal glands.

The scrofulous enlargements will be chiefly benefited by the constitutional treatment of the disease of which they are part; and for this, nothing is to be compared to the influence of sea air and cod-liver oil. Small doses of iodide of potassium, in combination with preparations of iron, may be advantageously given with the oil. This is far more efficacious than the syrup of iodide of iron, which I believe to be an entirely useless preparation. The local treatment, as long as the glands are only swollen and tender, should consist in simply protecting them from cold, pressure, or other irritation, which is best done by covering the part with cotton wool. When, however, matter forms, or the caseous material softens and liquefies, a very small puncture should be made through the skin, and the contents of the abscess gently squeezed out, pressure being made by a pad of lint on each side of the opening. The puncture may require to be occasionally reopened with a probe; but by this means, adopted early, the integrity of the skin is preserved, and the unsightly scars and puckerings often seen in such cases are prevented. It is, moreover, very desirable, when possible, to get rid of the caseous products of inflammation, for they are otherwise liable to be the seat of constantly recurring suppuration, or may perhaps be the origin of a future tuberculosis.—*Medico-Chir. Review.*

Fracture of the Anatomical Neck of the Humerus.

A patient, aged forty, received an injury to the shoulder, and, on examination, the diagnosis of fracture of the anatomical neck of the humerus was made. The reasons for the diagnosis were crepitation at the shoulder-joint, without depression below the acromion. When the humerus was rotated the tuberosities rotated with it, showing that the fracture was undoubtedly at the anatomical neck. On measuring the arm, a shortening of one-third of an inch was detected. The treatment consisted in the application of a plaster-of-Paris bandage over the arm and shoulder, so as to keep the fragments at rest and in position.—*Eclectic Medical and Surgical Journal.*

CONGENITAL ABSENCE OF THE EYE-BALL.

BY M. F. COOMES, M.D.,

Assistant to the Chair of Ophthalmology and Otology in the Hospital College of Medicine.

Mr. T—— consulted me on the 22nd of February, 1876, in regard to some defect about his child's eye. The child is a male, about four months old, perfectly healthy in every respect, and has been so since birth It is very sprightly, much more so than most children of that age; its complexion is fair, with light hair and pale blue iris. The left side of the head, face, and thorax are perceptibly smaller than the right. There is no difference in the size or length of the upper or lower extremities on either side; they are as large and perfect in function as they should be. The tongue and palate are perfectly normal in function and size. From all that can be observed the vocal organs seem to be perfect. There is a complete absence of the eyeball on the left side. The lids are smaller on that than on the other side, though well formed, with perfect lash and brow. They move with almost as much freedom as those of the opposite side. The tears flow just as profusely from that eye as the other when the child cries, showing that the lachrymal gland is present and endowed with its proper function. The palpebral fissure on that side is about one-third of an inch in length. The cavity of the orbit looks very much as if the globe had been enucleated, with the exception that it is not so deep and the concavity is more regular. The right eye is somewhat smaller than it should be, though its form is perfect in every particular as far as can be determined by the naked eye and the ophthalmoscope. The retina presents the appearance of that met with in fair complected persons. The right eye is affected with nystagmus and convergent squint. The child is able to fix his eye upon an object for a few seconds, but soon changes its position. Any undue excitement increases the rapidity of motion in the globe.—*Louisville Med. News.*

Sir John Cordy Burrows, F.R.C.S., President-Elect of the Brit. Med. Association, and the eminent Dr. Traube, of Berlin, are dead.

BELLEVUE HOSPITAL, NEW YORK.

SEPARATION OF THE EPIPHYSES.

To the ordinary practitioner, cases of separation of the epiphyses of the bones are rare, and it is only where a large number of surgical cases are under observation, as in a hospital, that the injury can be studied to good advantage. At the present time there are two cases of this species of fracture in the surgical wards: one, separation of epiphyses at the upper end of the humerus, and the other separation at the lower end of the femur.

The first case occurred in a boy fourteen years of age. It was produced by falling on the shoulder. On examining the case, cartilaginous crepitus was obtained, and on pressing the arm inward the humerus was made to project outward. The case differed from one of fracture of the anatomical neck, in the fact that when the arm was rotated the tuberosities of the humerus did not rotate. It differed also from fracture of the surgical neck in being too high up, and from there being but slight displacement. The case was treated by reducing the fracture and applying a shoulder-cap and side-splint.

The second case of separation of the epiphyses happened in a boy aged twelve. The injury was received by falling from a coal-box to the pavement.

When he was examined in the hospital, an effusion into the knee-joint was detected, and at the same time, on manipulating, cartilaginous crepitus was found near the joint, with a false point of motion. The case was treated by making extension and putting the extremity up in a fracture-bandage.—*Eclectic Medical and Surgical Journal.*

International Medical Conference.—We have been requested by Dr. David of Montreal to state that the meeting of conference of American and Canadian Medical Associations has been postponed from June (the time announced in our last issue), to September 2nd. This has been done in consequence of many Canadian medical men wishing to attend the International Medical Congress which meets in Philadelphia in September.

TORONTO GENERAL HOSPITAL REPORTS.

CASE OF THORACENTESIS.

R. J., aged 17, admitted March 6. Patient had been complaining for about two weeks before admission. On his entering the Hospital, it was concluded after a careful enquiry into the history of the case, together with physical examination of the chest, that the right pleural cavity was filled with fluid. He suffered principally from pain, cough, and rapidity of breathing. Respiration 40, pulse 100, heart somewhat displaced to the left side.

Feb. 7th, Dr. Aikins tapped the chest, inserting ordinary trocar and canula. After drawing out the trocar he passed an india-rubber tube, with a stop-cock attached, through the canula, the other end of the tube being under water. The part in which the stop-cock was, accurately fitted the canula. In this way 39 oz. of reddish brown coloured fluid were drawn off. No cough, or bad symptoms of any kind followed and the patient is now doing well. Dr. Aikins mentioned in a clinical lecture on this case, that he had operated similarly on a patient in the Central Prison, when he drew off 32 oz. Patient did well in every particular.

CASE OF NECROSIS OF THE LOWER PORTION OF THE SHAFT OF FEMUR.

W. M., aged 19, admitted Feb. 28th; patient had typhoid fever about a year and a half ago. Was then for four months in bed, two or three weeks after the commencement of the disease pain and swelling were noticed in the lower part of the thigh. Suppuration followed and open sinuses remained up to the time of admission. Patient was operated on by Dr. Aikins, March 2nd. A very large sequestum was removed. The operation was accompanied by severe hæmorrhage, notwithstanding which the patient made a good recovery. The incision was made from the side of the thigh.

Death of Prof. Steiner.—Prof. Steiner, author of a "Manual of Children's Diseases," which was lately translated into English, died at Prague on the 15th of February.

Midwifery.

THE CHANGES IN MIDWIFERY PRACTICE AND IN THE TREATMENT OF UTERINE DISEASES DURING THE LAST TWENTY YEARS IN THE ROTUNDA HOSPITAL, DUBLIN.

BY LOMBE ATTHILL, M.D.,

Master of the Hospital; Vice-President of the King and Queen's College of Physicians in Ireland.

* * * * * *

The rule which guided obstetric teachers when I was a pupil was this, "that meddlesome midwifery was bad," a rule not devoid of truth when applied to the attempts made by ignorant practitioners to accelerate delivery, but to be utterly repudiated when applied to the skilful efforts of the educated accoucheur. The effect of the rule was this, that women were allowed to linger in agony for fifty and sixty hours—aye, and even for a much longer time—without any attempt being made to relieve them. The results, I need hardly say, were lamentable both as regards the mother and the child. Many mothers sank, worn out by long-continued suffering, or died subsequently of peritonitis, the result of unduly prolonged uterine action. In others sloughing of the vagina followed, caused by the long-continued pressure exercised by the fœtal head on the soft parts of the mother. This again was followed either by the formation of dense bands occluding the vagina to a greater or less extent, and which often opposed serious obstacles in subsequent labours, or by the formation of vesico or recto-vaginal fistulæ, a source of the most intolerable misery to the unfortunate patient, rendering her loathsome alike to herself and to others. Nor were the results as regards the child less lamentable. Women were allowed to linger on in labour till, their children being dead, the perforator was used—an instrument harmless enough to the dead infant, whose life, however, was not the less sacrificed to a rigid adherence to the rule of non-interference.

All this is now changed. It is the recognized rule, followed by every well-informed practitioner, that women should not be left to linger on in suffering, but that delivery should be accomplished by the forceps when once we are satisfied that Nature, unaided, is unable to effect delivery within a safe period. What that period may be cannot be fixed by any definite rule, each case must be judged by itself; but the axiom in general adopted is this, that when once the head ceases to advance, or to advance so slowly that delivery by the natural efforts cannot be expected to take place within a reasonable time, the forceps should be used. Some idea of the change in practice in this respect may be formed from the fact that in 6,634 deliveries which occurred during three years of the mastership of Dr. Charles Johnston, whose pupil I was, the particulars of which are recorded by Drs. Hardy and M'Clintock, the forceps were used but eighteen times, or less than once in every 360 cases; while in 7,027 deliveries which occurred under the mastership of Dr. George Johnston, between November, 1868, and November, 1874, the forceps were applied 639 times, or once in about every 11 cases. The difference is so startling that we are naturally inclined to ask, Is the frequency of recourse to the forceps absolutely necessary? I am not prepared to give a definite answer to this question; but of this I am sure, that while no injury is inflicted by the forceps on either mother or child when the instrument is used by skilful hands, the most lamentable results followed the old practice of non-interference.

So much as to the frequency of the use of the forceps. Now as to the rules which were laid down for its use as compared with those at present acted on.

The conditions "which were considered indispensable in order to render the forceps applicable, and without which they were not used," by Dr. Charles Johnstou were these: (*)

1. That the child be alive.

2. That the head have remained stationary for six hours at least.

3. That the membranes be rupturing, and the os uteri fully dilated.

4. That the head of the child be so circumstanced that the ear can be distinctly felt.

5. That the state of the soft parts be such as denotes the absence of inflammation.

* "Practical Observations." By Hardy and McClintock, 1848. p. 89.

Time well not permit one to contrast *in extenso*, as I might with profit do, the great divergence which has taken place in the present day from the practice laid down, and rigidly adhered to, by those who were my teachers; I must content myself with summarising.

The 1st and 5th rules are still admitted by all practitioners, only with this great difference, that we never now wait till the life of a child is in any danger, and as a consequence of our prompt interference "inflammation of the soft parts" is now virtually never met with during labour. Therefore, though we admit the truth of the principles inculated by these rules, the necessity of acting on them is never likely to arise in our practice. Rules 2 and 4 we altogether repudiate.

I am not able to give you any definite one in place of rule 2. I can only say that, if once we are satisfied that the powers of the mother are insufficient to accomplish delivery within a reasonable time, we at once proceed to effect delivery by means of the forceps I should not think of leaving a patient to linger on in suffering for one hour, much less for six, after I was satisfied that the head had ceased to advance, and not unfrequently I apply the forceps even though I am satisfied that it is slowly advancing. Gentlemen, the rule I refer to is now discarded by all obstetric authorities. I recommend you to discard it also. I can, with equal confidence, advise you to disregard rule 4. Many years have passed since I felt the ear of the child, for the simple reason, that I never try to feel it. I lay stress on this, because I find that many candidates for the licences of the College of Physicians, whom it is my duty to examine, when questioned as to the use of the forceps, say that the ear should be felt before it is applied. I presume these gentlemen practice what they say, and that practice I pronounce to be wrong.

(To be continued.)

FŒTUS WITH TEETH.—Dr. J. N. Upshur recently attended a woman in labor who gave birth at full term to a healthy infant which had two incisor teeth.

DIAGNOSIS AND TREATMENT OF THE CURABLE FORMS OF FIBROID TUMORS OF THE UTERUS.

Dr. Alfred Meadows, in a paper on this subject, read before the Harveian Society of London (*British Medical Journal*, Nov. 13, 1875) said, that these forms of morbid growth being more amenable to successful treatment than was generally supposed, their diagnosis in relation to the uterine walls was of the first importance, and Dr. Meadows relied very confidently on the differential indications of hemorrhage and pain. Hemorrhage, according to his experience, pointed to an intra-uterine, submucous, and curable form of tumor; whilst pain was usually associated with the subperitoneal or almost incurable class. Coming to more exact means of diagnosis, it was found that cervical displacement arose from a growth in the opposite direction; that a closed os, and small and rigid cervix, were almost fatal signs of incurability; the larger and softer the cervix, the better being the operator's chances; and that, by the use of the sound, very valuable information might also be obtained. As the subperitoneal variety of tumor did not encroach on the cavity of the uterus, there was none of that elongation which was met with in the submucous form in direct proportion to its size; and by working with the sound, in conjunction with the finger in the vagina, one could tell, by the thickness of tissue intervening between these points, whether the morbid growth occupied the anterior or the posterior uterine wall. As regarded the drug-treatment of these cases, he had only derived real benefit from ergot, which frequently acted well in small soft tumors, by cutting off their supplies of blood, and causing steady compression by contraction of the unstriped muscular fibres in which they were imbedded. Operative measures were next discussed; and gastrotomy, which was occasionally performed for removal of subperitoneal growths, was only justifiable if the tumor were fairly out of the pelvis, and the cervix, as well as a good part of the body of the uterus, free from disease. In the submucous varieties, the tumor was reached by dilatation of the os and cervix; and, its investing capsule being broken down, enucleation was done more or less completely with the finger; valuable aid

being derived in very large growths from Greenhalgh's olive-shaped cautery, removal being then completed by the expulsive action of the uterus, aided, if necessary, by ergot. As regarded after-treatment, rest was, of course, all-important. Hemorrhage must be checked by styptic plugging; septicæmia, by antiseptic injections; and inflammation, by opium; it being pointed out that cystitis more frequently followed operations on the anterior than on the posterior uterine wall, in consequence of the larger quantity of cellular tissue which lay between the uterus and bladder, than between that organ and the rectum.—*Abstract of Medical Science.*

Uterine Asthma.

Mr. J. Waring-Curran records (*The Practitioner*) a plan of treatment which he has found most efficacious in that form of asthma met with not infrequently in those patients at a particular time of life, who suffer from uterine tumour. The drug which will relieve the asthma, at any stage, he says: "Is belladonna applied locally and given freely internally. The extract I find the most satisfactory and reliable preparation for external use, and the tincture I give internally, combined with full doses of the bromide of potassium. In the intervals I prescribe iron and strychnine, and apply iodine locally. All new-fangled remedies have failed in my hands, and subcutaneous injections have never proved either safe or satisfactory. In any instance where there is prolapse of the womb with a tumour behind, and uterine asthma occurring, I use a belladonna suppository. The effect on the eye is sometimes complained of, but there is little choice in the alternative of this temporary inconvenience and the nature of the suffering which uterine asthma induces. I may say in conclusion that the extract of belladonna should not be confined alone to the region where the tumour is situated, but that the spinal nerves should get the benefit of a little, spread on a piece of lint, and applied along the lower dorsal and lumbar spines; but applications to the chest afford about as much relief as they would to the knee in incipient hip-joint disease."—*Monthly Abstract, April* 1876.

AMYL-NITRITE LOCALLY FOR OBSTRUCTIVE AND NEURALGIC DYSMENORRHŒA.

For some months past Dr. L. B. Edwards has treated several cases of obstructive and neuralgic dysmenorrhœa by placing a gelatin capsule containing three or four drops of amyl-nitrite against the os uteri, while the patient is lying on her back. Within a few minutes the capsule dissolves and the amyl is poured out against the cervix, which sometimes causes a momentarily stinging pain about the part. The relief from pain is almost instantaneous, and in the cases of obstructive dysmenorrhœa the menstrual discharge is soon established regularly. The patient herself may introduce a second and a third capsule at intervals of four hours should the "young labor pains" recur. The Doctor's experience thus far is limited to five cases, but he has had opportunities to repeat the experiment in four of them. The treatment is not curative, of course, but palliative; however, in one case of neuralgic dysmenorrhœa the suffering was much less intense at the last period than at the former month, when the amyl was used. He thinks he has noticed a longer relief in the two last instances in which he has combined belladonna extract with the amyl in the capsules. The more general effect of amyl upon the capillaries of the upper portion of the body has not been observed after these vaginal applications. In ordering the capsules in the first instance, Dr. Edwards had half a dozen prepared by a neighboring apothecary. In about an hour, or less, the amyl had dissolved the capsules left in the pill box, and the odor of amyl pervaded the whole house. The lesson is, charge the capsules at the moment they are needed—not before.—*Virginia Medical Monthly.*

Sudden Death after Uterine Injection of Iron.

The following case was reported by Dr. Cederschiöld before the Swedish Medical Society, and it is of interest, as being another instance where injection of fluids into the uterine cavity has been followed by sudden death. The patient was pregnant for the second time.

A considerable hemorrhage followed the birth of the child, the uterus did not contract fully, and the fundus could be felt over the pubes. Ergot was of little use, and the hemorrhage recurred fram time to time. Eighteen days later a strong solution of the perchloride of iron (1 : 7) was injected into the uterus. Every precaution was taken; the syringe was freed from air, the pressure of the piston was gradual, etc., but when the injection was half completed the woman suddenly complained of pain in the breast, stretched backward, drew a few short breaths, and was dead. (Pulmonary embolism or heart clot?)—*Medical Record.*

CASE OF OCCLUDED VAGINA WITH RETAINED MENSES; OPERATION.

The following case occurred in the service of Dr. T. Addis Emmet, in the Woman's Hospital, New York:

The patient was a girl fifteen years of age, well developed, and florid in appearance. She had never menstruated, but for the past eight months had suffered pain, referred to the pelvic organs, at regular monthly intervals.

Physical examination showed the vagina to be either absent or entirely occluded. With a finger of one hand in the rectum and the other hand on the abdomen, a large fluctuating tumor —the distended uterus—could be distinctly felt.

Having placed the patient under ether, March 14, 1876, Dr. Emmet introduced one finger of the left hand into the rectum, and, having an assistant hold a metal sound passed into the bladder, proceeded cautiously with a pair of blunt-pointed scissors to divide the firm tissue between the urethra and rectum. Partly by cutting, and partly by tearing with the finger, a depth of about an inch and a half was gained. A small trocar was then thrust into the uterus, and the escape of thick, black fluid confirmed the diagnosis. A large opening was then made and over a quart of fluid evacuated. The neck of the uterus could then be distinctly felt, by rectal touch, less than two inches from the anus. The cavity of the uterus was thoroughly washed out with hot water containing a little crude carbolic acid, and a closed glass plug was placed in the vagina to prevent union of the fresh surfaces.

The Treatment of Ovarian Cysts by Acupuncture (Semeleder: *Wiener Med. Presse*, No. 52, 1875.)—Two years ago S- learned that a patient who was known to him had been treated by acupuncture (?) galvano-puncture in Dresden with good results, and that she had afterwards been subjected to the same treatment in Vienna, by which she was entirely cured. Since that time he has tried this mode of treatment in the following three cases:

1. A virgin, aged 18, with an ovarian cyst on the left side. At the end of four months the circumference of the abdomen had markedly diminished, and at the expiration of two months more the cure was complete.

2. A married woman, aged 24, who had borne two children, presented herself with an ovarian cyst as large as the head of a child aged two years. He reports that this patient was cured at the end of two months, the remains of the tumor forming a hard mass of the size of a small apple.

3. A married woman, aged 42, with an ovarian tumor reaching to the umbilicus. The duration of the treatment in this case was six weeks. In neither of these cases were there any alarming intercurrent symptoms, and there has been no refilling of the cysts noticed. S. thinks that the good effects of the treatment are owing to the property of producing coagulation in albuminous fluids which is manifested at the positive pole of a battery. He thinks that the presence of several cysts is no contra-indication for the employment of acupuncture, and suggests that further experience will possibly show whether this mode of treatment may not be advantageously combined with puncture and the injection of iodine.

Each sitting was of but short duration, and some galvano-caustic action was not always avoided. Similar good results might be obtained from the employment of acupuncture in the treatment of a echinococci.

Enlarged Tonsils.—Caustic soda and lime in equal parts will remove enlarged tonsils. The preparation is made at the moment of using it, by adding a few drops of absolute alcohol, and mixing thoroughly, and applying it by means of a glass rod.—*Dr. Ruppaner.*

Translations.

From the Paris *Médical* of the 2nd March, we clip, and give in brief, the following :—

First a *case of Cysticerci* is reported. A coachman, aged 27, on the surface of whose body a number of small tumors, from a third to a half an inch long, and about half that width, made their appearance. One day he fell from a horse, having been seized with loss of consciousness. About seven months after he noticed the beginning of a little tumor on the breast, soon after others appeared. He had another attack of loss of consciousness in the hospital, but no convulsions. M. Broca diagnosed cysticerci and the microscope confirmed the diagnosis. The treatment consisted in puncturing the cysts with a cataract needle, to the number of three hundred and sixty-five ; after that they would slowly disappear. The patient passed tapeworm during and for four years before the existence of the cysts.

A Case of Hemiplegia and Aphasia Occurring in an Intermittent form (not in the periodic sense of the term) resulting from syphilis,—Is reported under the care of M. Mauriac. Partial recovery took place, a result ascribed, by M. Mauriac, to time and iodide of potassium. Syphilitic rupia and gummatous exudations had made the diagnosis easy.

Subcutaneous Injections of Ergotine for the arrest of hemorrhage is the subject of another article. A case is recorded where there was a continuous slow hemorrhage, from a fibroid tumor of the uterus. There was slight pulmonary œdema and vomitings, A solution of 4 parts of ergotine to 15 each of glycerine and water was made, and 20 drops injected daily. In fourteen days the metrorhagia ceased.

Death During, or soon after, Thoracentesis has been made the subject of study by Mr. Foucart who has investigated the causes of sixteen cases. In some he ascribes the cause to the heart, in others to the lungs. In the heart cases he found clots in the heart or pulmonary vessels, clots due to a bad, anæmie cachexia. If the lungs have been the cause there is congestion and pulmonary œdema, with or without albuminous expectoration. The following precautions are recommended : to avoid during the operation all movements and emotions which may produce syncope ; to operate as much as possible in the horizontal position ; to remove the fluid *slowly* and stop its flow if necessary ; not to take too much fluid away at once ; if an aspirator is used, have as small a canula as possible.

Employment of Ice in Hysteria and Epilepsy.

M. Charcot (in *Progrès Médical*) advises the use of ice in these cases. It is broken into pieces the size of a walnut, and put into a bladder. In hysteria it is laid over the ovarian region, at first for half an hour, and afterwards for an hour, and an hour and a half, morning and evening.

It is applied over the pericardial region in cases of epilepsy when the seizures follow the occurrence of an increased frequency of pulse, palpitation, and pains in the preicordial region.

Accidents in Hypodermic Injections.

The Paris *Médical* of 23rd March, after referring to the occasional occurrence of very severe pains, and of abscess as a result of hypodermic injections, refers to another, but very infrequent, accident spoken of by Mr. Chouppe. When the canula enters the cavity of a vein the patient is seized, in about twenty-five or thirty seconds, with creepings in the hands ; soon they go through the whole body ; almost at the same time the veins of the neck swell ; the face becomes red ; the arteries beat violently ; the pulse rises to 120, 140, and soon 160. The head becomes giddy ; the patient has profound anguish, it seems to him as if he were going to fall. In about a minute and a half a cold sweat pours off the body. In a few minutes all comes right again, except that the heart sometimes remains excited for hours.

To avoid this accident he recommends that the canula be introduced unattached to the syringe, and that if the practitioner observe that blood flows from it he must either introduce it in a fresh place, or send it on through both walls of the vein, before injecting.

In Diptheria, some physicians in Naples are using oxalic acid (one part in 20 of water or one in 7 of glycerine) as a local application, whilst they gave sulphenate of Quinine gr. $\frac{3}{4}$ to grs. 3, four times a day. Dr. Francesco speaks highly of the Sulphenate of Quinine also in the grey hepatization of pneumonia.

In Tetanus, Jaborandi in daily doses of a drachm of the leaves, in infusion, has been said by Dr. Brompart to effect a cure. It produced profuse diaphoresis and salivation. The editor of the *Paris Médical* expresses his belief in its efficacy and highly extols it as a sudorific, and attributes its failure, in the hands of some practitioners, to the fact that some of the piperaceæ have been palmed off for it in the European market. It has been highly extolled by others for its action in removing serous effusions. In a previous number of the *Paris Médical* is a report of a case of tetanus cured by chloral.

Application of the Thermometer to the Uterus as a Means of Diagnosis.

D. Colinstein, in the *Archiv. für Path. Anat. and Physiol.* has an article on the above subject, of which we may briefly say that he has found the temperature of the neck of the normal uterus when unimpregnated, and of a uterus containing a dead fœtus, varies very little from that of the vagina; whereas the temperature of a uterus containing a living fœtus is from one to two degrees [F.,] higher. The existence of fibroids and endo-anperi-metritis also raises the temperature somewhat. The bulb is introduced into the os, a proceeding which he admits to be apt to induce abortion in certain cases; but nevertheless worth the risk in others.

Mediate Dilatation of Urethral Stricture.

This method, pointed out by M. Longlebut, requires, 1st a series of conductors, formed each of a bulb-pointed gum elastic catheter, with a thin wall split lengthwise from its free, to within two inches, or a little more, of its vesical end; 2nd. A series of whalebone dilators made thin and flexible, ending in olive-shaped or fusiform bulbs, about an inch or so long. Both are graduated in millimetres. The size of the conductor required is measured by the size of solid bougie which can readily be passed through the stricture. The conductor is then introduced, its split [for obvious reasons] towards the superior wall of the urethra. A dilator which would open the split a millimetre [393 of an inch] is then introduced and pushed into into the stricture, the greased bulb being pressed gently against the lower wall of the conductor. An increase of a millimetre is thus gained, and this may be doubled or tripled at once, by the use of larger dilator. Afterwards constantly increased dilators are used. According to its orginator this method would avoid wounds on the healthy parts of the urethra.

Phenic Acid in Skin Diseases.

Beidgen recommends its topical use:

In chronic eczema in a solution of 5 parts of alcohol and 120 of water, applied every morning with camel's hair pencil.

In acute eczema it is contra-indicated.

In psoriasis, on the other hand, it answers well.

In obstinate psoriasis, the following may be used; phenic acid 5, alcohol and distilled water 20 parts. It has to be stopped every three or four days on account of its irritant action.

In prurigo a solution of 5 to 500 parts is used.—*Progrès Medical.*

Hypodermic Injection of Distilled Water.—The *Progrès Médicale* again calls attention to this method of anæsthesia, introduced by M. Lafitte, of Paris. A patient attacked with the most acute articular rheumatism has obtained almost instantaneous relief, and could move, after the injection of water in the vicinity of the painful joints. M. Lafitte reports the case of a woman afflicted with the most painful lumbago, which was immediately relieved by the injection of four syringefuls of distilled water. Cases of facial neuralgia, pleurodynia, sciatica, etc., are reported, in which the results, however, were not always definite. M. Lafitte believes that, after more extensive trial of this agent, we may have acquired a remedy which, without the disadvantages of morphine, possesses its efficacy as an anæsthetic.—*N. Y. Med. Journal.*

THE CANADIAN
Journal of Medical Science,
A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, MAY, 1876.

THE MEDICAL COUNCIL EXAMINATIONS.

THE written examinations by the Medical Council began on the 4th of April, and the students were summoned to the city for the oral examinations on Tuesday, the 11th, but some of the examiners were not ready to report on their papers till Wednesday noon, and consequently the Board was not able to proceed with the oral examinations before Thursday morning, when this part of the work began, and proceeded under difficulties until three o'clock on Friday morning. In the mean time, from the peculiar appearance and manner of some of examiners, the students got the idea that proceedings were being delayed by the intoxication, and factious conduct thereby induced, of those before whom they had to appear, and manifested their disapprobation by groaning and hissing at the door of the chamber in which the examiners were meeting. These demonstrations were continued more or less till the close of the examinations on Friday morning, when they culminated in three of the examiners, Drs. Dewar, Wm. Clarke, and N. Bethune being assaulted with eggs, stones and other missiles as they were leaving the University in advance of their colleagues.

Now, when we find so large, intelligent and respectable a body of young men from all parts of the Dominion either taking part in or countenancing such riotous proceedings, we may be quite certain there is something radically wrong, and that it is high time the Council should inquire into the matter.

The students assert that some of the examiners were intoxicated, and thereby delayed the proceedings, keeping them in the city on expense a much longer time than necessary, but we are not called upon to deny or vouch for the truth of the statement. When, however, we see men for a few hours tearing about the room, vociferating, gesticulating, swearing, foaming, and shouting like a lot of wild Irishmen at a Donnybrook fair, or for all the world like a lot of mad bulls, and then all at once become peaceful and courteous for the remainder of the day, "a too hypercritical public" may put a very uncharitable construction on their conduct.

The proceedings of the Medical Council and its Examining Board have always been noted for their turbulence and riotous character, some members of the Council always taking advantage of its meetings to indulge in bacchanalian revels which should cause a blush of shame to mantle the cheek of every well-wisher of the profession, and more especially of the electors who send them to the Council, term after term, when it is well known they are always in a state of chronic alcoholism. It is not many years since some of these gentlemen, while attending a Council meeting in Hamilton, in one of their saturnalias, battered in the chamber doors in the hotel where their colleagues were sleeping, and we are told by members of the Council, that the same disgraceful proeeedings which characterized the late meeting of the Examining Board have been repeated by the same parties year after year, both at the Council and Board meetings, until our informants have gone home, over and over again, thoroughly heart-sick, and nothing but a profound sense of their duty to the profession has induced them ever to return to the scene of such proceedings. It is with a feeling of profound regret we thus write of an institution we helped to create, and which, both through the press and by personal influence, we have supported with all the energy begotten by a strong conviction of the necessity for its existence; but we candidly confess that if these proceedings are to be tolerated by the profession or condoned and rewarded by the majority of the Council who do not take part in them, it will be better to wipe the Council out of existence. One hundred and thirty-seven candidates

presented themselves for examination this year, and we suppose that is about the average number every year; and we ask the Council and the members of the profession who elect them, what kind of an example they are placing before these young men, or what degree of respect these gentlemen will carry with them into the world for a profession, whose chosen guardians make such an exhibition as these one hundred and thirty-seven students saw and heard at the recent Council examinations?

We are happy to know that a majority of the Council disapprove of the riotous conduct of their colleagues; but so long as they allow themselves to be ruled by such a minority, and even confer positions of honor and trust upon them, we must hold all alike responsible. The whole remedy does not lie with the Council, however; for so long as the profession will send to the Council, as their representatives, men of known intemperate habits, these proceedings will recur and the Council will be partially powerless in the matter. We should be very sorry to have the Council destroyed; but with such men on its Examining Board there is a growing conviction that neither the public nor the profession have any guarantee that their interests are in any better hands than under the old *régime*, while the students assert that they are passed or rejected according to the mood of the examiners, instead of their own merits or professional attainments.

THE MEDICAL COUNCIL'S BOARD OF EXAMINERS FOR 1876.—The examiners appointed by the Medical Council to conduct the recent examinations were, Dr. Wm. Clarke, of Guelph; Drs. Edwards and Henderson, of Strathroy; Dr. Daniel Clark, late of Princeton; Drs. N. Bethune, U. Ogden, C. V. Berryman, and D. Campbell, of Toronto; Dr. Dewar, of Port Hope; and Dr. M. Lavell, of Kingston.

MIDLAND AND YORK.—Dr. James Ross, Midland and York, representative on the Ontario Medical Council, desires us to state that he will be pleased to receive the names of those medical men in his division who may wish to be appointed examiners at the next meeting of the Council.

THE COUNCIL OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.

It is a matter of deep regret that it becomes our duty to refer in any other than a complimentary manner to any part of the management of this body at the present juncture. Recent developments, however, in connection with the Examining Board of the Medical Council, render it imperative, as a duty we owe to the profession and the general public, that we should let our voice be heard in unequivocal terms. With many conscientious members of the profession there were grave doubts at the outset as to the possibility of rendering such a composition of the Council as that now existing, effective for the objects contemplated. It was doubted whether elements so antagonistic could ever be brought into such harmony as to effect the great purposes of the amalgamation, and so result in the elevation of the profession in this Province. Events subsequent to the passing of the Medical Act in its present shape largely justify the conclusion that the fears that have been entertained have not been without foundation. Not one single meeting of the Council has passed over without scenes most discreditable to all concerned. Those calling themselves the "regular" profession, either wittingly or unwittingly, have constantly indulged in insinuations against the honesty of those holding views in opposition to them. As would naturally be expected, these insinuations have been met with sharp retorts; and the result has generally been that the annual meetings of the Medical Council have been little better than "*bear gardens*," and have come and gone with very little work accomplished, and that at times of a very indifferent class. True, one result has followed which, all other things being equal, would render the present law a great boon to society. The standard of education, preparatory as well as professional, has been made uniform for the entire Province. There is reason to believe that, in some particulars also, the standard has been elevated, although, with the information that has reached us from time to time, even this statement might admit of some doubt. But granting that there has been a *bona fide* improvement in these two particulars, they are

entitled to be regarded as strong points in favor of the existing law, if this law can be carried out harmoniously and to the entire satisfaction of all concerned. The history of the deliberations of the Medical Council and their entire management of professional matters have not been such as to encourage the hope that this important end will ever be accomplished. New causes of grievance are constantly liable to occur; unpleasant references by one school of Medical faith to the absurdities of the opinions of those holding opposite views will be made; and thus, whatever benefits might be expected as a result of the amalgamation may fail of realization.

But apart from this view of the existing law, there are some features in the management of the affairs of the College of Physicians and Surgeons by the present Council to which we feel bound most strongly to object. It may fairly be questioned whether it is prudent for the Council to appoint themselves the Examining Board for that body, or to appoint any one of their number as a member of such Board. They are supposed to be the appellate body to whom any student must submit his grievances, if he has any. If, therefore, they are in a position to adjudicate upon their own actions in a capacity entirely outside of their positions as members of the Council, their value as an appellate body is completely destroyed and the student is left without any proper tribunal before which to seek redress. It is a privilege, moreover, belonging to the Council through their advisory committee, to have a general supervision over the Examinations while such Examinations are in progress. But certain members of this advisory committee are made Examiners themselves. Who are left, in such a case, to exert a controlling influence over these Examiners? Great injustice may be done in many ways, and yet there is no reliable means of redress. We do not pretend to doubt for a moment the competency of any member of the Council who has acted in the capacity of an Examiner. But we do most seriously object to their occupying a relation in which they may afterwards have it in their power to cover up irregularities or improprieties of which they may have been guilty, without any efficient means being accessible for the prevention of such an issue. If a member of the Council, in his capacity as an Examiner, is guilty of conduct not only reflecting great discredit upon himself but disgrace upon the body whom he represents and the profession in general, the most abundant facilities should be provided in the shape of an authority to which he must be amenable, and over which he can exert no improper control. This cannot be so long as the same man who, as an Examiner, perpetrates an offence, has an equal power afterwards as a member of the body appointing him to stifle investigation into his behaviour. We have no hesitation, therefore, in pronouncing the principle a vicious one in every particular, and one which ought to be discontinued as speedily as possible. Surely it will not be said by any one that there was any real necessity for adopting such a precedent. The material at the disposal of the Council in this Province is sufficiently abundant, in all conscience, to have enabled them to make selections as Examiners against which no valid objection could have been raised.

Upon the reported behaviour of certain members of the Examining Board during the recent examinations, we have not much to say at present. It is barely possible that they may be judged harshly and that the heinousness of their offence may be greatly exaggerated. We must, however, express the hope that, at its next session, the Council will spare no pains to ascertain the truth or falsity of the rumors recently in circulation. We cannot afford to compromise the dignity of a profession so noble and philanthropic as ours, in the smallest degree; and if, after an impartial investigation of all the facts and circumstances, those gentlemen whose conduct now appears in so unfavorable a light before the public, are able to show that a great injustice has been done and that the tongue of calumny has again been at work, let them be honorably acquitted and the responsibility rest upon the proper shoulders. If, on the other hand, the charges against them can be substantiated upon reliable testimony, it is also to be hoped that the Council will not fail to mark its disapprobation of such conduct by forever placing itself beyond the power of the

reproach which must necessarily attach itself to the existence of such gross abuse.

It is a matter for deep regret that some of the students should have so far forgotten themselves as to resort to such means of redress as they are reported to have adopted. Open rebellion is an expedient justifiable only under the most extreme circumstances. In these days, when men in almost every possible emergency have milder means of redress at their disposal, we cannot justify the adoption of such weapons of defence as seem to have been adopted in the circumstances referred to. It would have been sufficient to have invalidated the entire examinations, so far as they were conducted by the gentlemen charged, if the charges could have been substantiated; and the students would then have had all the justice they could reasonably have desired. It was at least a pity, therefore, that the means adopted for securing redress had not been tempered by more discretion.

The death of Dr. Henry Letheby, for many years Lecturer of Chemistry and Toxicology, in the Medical School of the London Hospital, is announced. Until two years ago Dr. L. also occupied the position of Medical officer of Health and chemical analyst to the city of London.

Dr. Geo. Johnson has resigned his recent appointment of Examiner in Medicine to the Royal College of Surgeons. Dr. George Johnson has been appointed to the chair of Clinical Medicine in King's College. Dr. Beale has been appointed Professor of Medicine.

Canadians in England.—Blackader, A. D., of McGill College; Fraser, D. B., of Trinity College; Scott, W. F., of McGill College; and Tucker, Milton M., have passed their primary examinations at the Royal College of Surgeons, England.

Examination Questions.—We are obliged to hold over until June the questions given at the Examination of the Medical Council.

Communications.

TRICHINA SPIRALIS.

BY WM. OSLER, M.D.

(Concluded from the April Number.)

When a student with Prof. Bovell, of Toronto, I had several opportunities of studying these parasites. In the month of February, 1870, while dissecting a subject with Dr. Zimmerman in the Toronto School of Medicine, we discovered numerous trichinæ throughout the whole muscular system, all of which were densely encysted, many having become calcified. From a single drachm of one of the muscles of the arm I obtained 159 cysts, the greater number of which enclosed healthy-looking worms. This man was a German, and had been janitor at the hospital, where I had known him for over two years. He died of an acute affection, having nothing to do with the trichinæ. In all probability they had been encysted in his muscles for years, and the disease at the time had been mistaken, as it usually was before Zeuker's discovery, for typhoid or rheumatic fever. Oddly enough, on the 29th of March of the same year, while working at another subject, the same condition was found; trichinæ capsules existed through all the muscles of the body, and were more numerous and less degenerated than in the first case. They existed most abundantly in the muscles of the abdomen and arms, in the diaphragm, but above all in the tongue, which was so occupied with the cysts that a pin could hardly be driven in at any point without striking one.

With a view of artificially producing the disease in the lower animals, and studying the development of the parasites, I performed several experiments with flesh obtained from these subjects.

Experiment I.—On the 23rd February, 1870, I administered to a healthy rabbit ʒ iii. of trichinous flesh from the first case. A week after, as no effect followed, the dose was repeated. Fourteen days from the last administration the rabbit was killed, and the muscles carefully searched for trichinæ, but without success.

Experiment II.—On March 1st, to a full grown cat, ʒ iv. of flesh from the first case was

administered. On the 8th, the dose was repeated. Animal killed on the 14th. Intestines and muscles carefully examined: negative result.

Experiment III.—On March 1st, to a full grown terrier dog, ʒ iv. of muscle from the first case was given. Dose repeated on the 8th. Animal killed on the 21st. Muscle and intestines examined with negative result.

I had scarcely anticipated a successful issue in these experiments; the cyst walls were so densely impregnated with salts of lime that the action of the gastric juice could not have sufficed for their dissolution.

Experiment IV.—On March 30th I administered to a six months old pup ʒ v. of muscle from the second case. Dose repeated on April 2nd. Animal killed on April 14th. Neither intestinal nor muscle trichinæ found.

Experiment V.—On March 30th, ʒ iii. of muscle from the second case was administered to a full-grown rabbit. From the appearance of the animal a few days after the feeding I felt sure it was becoming affected, and did not repeat the administration. It was listless and indisposed to walk about, though its appetite was not much impaired. On the morning of the 21st the animal was killed. Examination of the muscles revealed the presence of numerous immature trichinæ. They were most abundant in the muscles of the thigh and abdomen. Many exhibited slow sluggish movements, boring between the bundles of muscles fibres; a few were becoming encysted.

For some reason or other experiments with dogs are not very successful; the worms appear to develop in the intestines, but nothing further results.

The only case I have had an opportunity of seeing in the human subject occurred in the clinique of Professor Traube, of Berlin, in November, 1873. Though a severe attack, the patient, under a stimulating treatment, recovered. I was much struck with the extreme prostration and helplessness of the patient, and the excessive tenderness of the muscles, many of which were swollen and firm.

Since, then, we obtain trichinæ almost exclusively from eating uncooked or semi-cooked pork, this barbarous custom is to be unsparingly condemned. Nothing will suffice for safety but thorough roasting or boiling, so that all parts of the meat shall have been exposed to a temperature of at least 150° F., in which case, even if the parasites are present, they may be eaten with impunity. The danger chiefly arises from the different forms of cured pork which are partaken of by many people in a partially cooked state. Sausages constitute another, and very common, source of danger. They should be thoroughly done, never presenting a reddish hue in the centre. Care should also be exercised that fresh roast pork be as well cooked in the interior as on the surface.

There can be very little doubt that the hog is the original bearer of the trichina, and that the disease is propagated from one to another through the filthy habits of the animal, aided by the negligence of the breeders. For some years the hog was believed to obtain the trichinæ by eating rats, in which they are not uncommon; but Zeuker and several other German authorities have shown that the trichinous rats are almost invariably inhabitants or frequenters of the shambles, where they obtain the parasites by feeding on the scraps. As is well known, numbers of swine are kept in the neighbourhood of shambles, and Zeuker calls attention to the prevalent custom of "feeding them with the waste meat, and of pouring into their troughs the water with which the chopping blocks and other instruments have been washed." Whole droves have become in this way trichinous. There can be very little doubt that the too common practice of making the stomach of the hog the receptacle of all the abominations upon earth is very dangerous, and frequently reacts with terrible effect. In this country we have happily, to a great extent, escaped; but whether from our civilized habits, or the immunity of the hogs from disease, it is impossible to say. Caution should be exercised, especially with bacon and hams from the Western States, where the disease among swine is almost as prevalent as in Germany; indeed, some of the worst epidemics in the latter country have been caused by eating the bacon imported from that locality.

THE McCONNELL CASE.

(Concluded from our last.)

The *Times'* report of the instructions of the Judge to McConnell's jury, shows that His Lordship adheres to the stereotyped "*right and wrong,*" or as the *Globe* not inaptly styles it, "*rough and ready,*" rule of decision. His Lordship appears also to hold that *delusion* is an essential element in the constitution of insanity. A perusal of a few of the latest eminent authorities on the subject of insanity, I feel persuaded, would not fail to relieve him from both mistakes. If our jurists would extend their researches od the subject of insanity, in its legal relations, to the works of distinguished foreign writers, they would hardly fail to profit largely by the labor. Among these, *Mittermaier,* the erudite Professor of Law in the University of Heidelberg, ranks pre-eminent. This writer had the great advantage of having studied medicine, before law, and of having, throughout his life, cultivated a close acquaintance with the insane, and with those charged with their care.

After laying down four excellent rules for the guidance of those who would form a positive opinion on the presence of insanity, Mittermaier goes on to say, "that in this way we may be enabled to know the influence of mental derangement at the moment of the perpetration of a crime, and the symptoms that support the opinion. Of no less importance is it to review the reasons which authorize the supposition that the commission of the crime marks the highest degree of the malady, the *detent* which often follows its accomplishment, the more or less considerable remissions which appear according to the nature of the disease."

"It is a noticeable circumstance," says Brierre de Boismont, the reviewer of Mittermaier, "that in many mental affections the deranged sometimes find solace for their own sufferings in the crimes they commit. The amelioration felt by them after the perpetration of the culpable deed, the return to reason, usually but of short duration, *but sometimes also permanent,* have been observed by all physicians for the insane. They have given to this state the name *detent,* and consider the crime as the highest degree of the disease." Mittermaier admits such a form of insanity of *transient mania,* but he says, whenever pleaded it should be submitted to special examination. He also treats very judiciously of another form which our judges will continue to ignore until they study insanity more largely and sedulously than they yet have done;—to wit, *reasoning insanity.* It is beyond all doubt that the editors of the *Globe* and *Times* would promptly take up arms against all such doctrines, though their own productions might go far towards establishing their truth, for if not striking illustrations of reasoning insanity, they might savour very strongly of insane reasoning.

Well, it finally culminates in this essential requirement "*for the interest of the State,*" that although, "for the good of the insane, the insanity law of the doctor is," in the words of the *Times,* "the best; for the safety of the lives of citizens the Judges' insanity law is indispensable," and it is therefore advisable "to hang a murdering madman once in a while." Now, it so happens that in the United Kingdom about one such each year has been hanged since the commencement of the present century. Has the immolation put an end to murders by madmen? Within a very short time past a Commissioner in Lunacy was killed by a lunatic in the ward of an asylum. Why had not this madman learned to fear the law? But, Oh, interposes the *Times,* we call for the "hanging of a madman once in a while," not for the terrorising of the insane, but for the edification of the sane. Does the *Times* "lay the flattering unction to his soul," that the hanging of an insane murderer will ever operate, or ever has operated, to the prevention of murder by the sane? It never has so done, and it never can do so. Its natural—inevitable—result is but to bring the administration of Justice into contempt. Such result ensued in a case, a few years ago, in the north of Ireland, where a man, to me, and to the most eminent medical alienistic jurist in America, manifestly insane, was hanged for murder. What was the moral impression on the unruly mass? They strained every nerve to murder the hangman, before he escaped from the town, and undoubtedly would have hammered him but for the protection of the police.

The following extract from the address to

the jury, in the Tierney case, by the Advocate Depute, (the prosecuting counsel,) Professor Muirhead, of Edinburgh, appears to me so clearly marked by good sense, and an advanced knowledge of the nature of insanity, that I cannot avoid here presenting it.

The Advocate Depute "argued that there was no ground for thinking the prisoner insane at the time the act was committed, either from the recurrence of his malady, or from an accession of homicidal mania." (*Note.*—Tierney had been insane for a considerable time sixteen years before, and was said to have had several short relapses.) "There was, however, an intermediate view that might be taken. They might, upon the evidence, feel themselves persuaded, that, *through the operation of disease*, at an earlier period, there had been, as regarded this man, a diminished power of regulating his actions. What would be murder in a man whose mental faculties had never been affected by disease, might, in the case of a man who had been so affected, and whose mental faculties were for the time obscured by disease, be looked on more leniently. If the jury, looking on all the evidence, felt that they could conscientiously pronounce a more lenient verdict, he asked them to find that the panel was guilty of culpable homicide." How utterly different is the preceding utterance of Professor Muirhead from the blood-beseeching address of the prosecuting counsel to the jury in McConnell's case! Professor Muirhead regards insanity as a *disease*. Mr. Sinclair pooh-poohed the idea that fracture of the skull was a fact worthy of any consideration in estimating the mental condition of McConnell!

I have, indeed, heard and read of cases in which severe fracture of the skull, resulting in actual loss of a portion of the brain, has transformed idiotic or half crazy persons into sensible men. I trust no such serious accident will ever befall McConnell's prosecutor. He has a splendid forehead, the beauty of which I would not see effaced for the exchange of any amount of mental frailty, for augmented rationality.

Dr. Yellowlees, the present Superintendent of the celebrated Gurtnavel Asylum, at Glasgow, and the writer of the article on Tierney's case in the *Journal of Mental Science*, contrasts the legal directions given to the jury in the trial of one Blamfield, a workman in the Chatham dockyard, by the judge, with the more rational charge of Lord Ardmillan. The English judge based his directions on the oft-quoted definitions of insanity by his predecessors and brethren; "but so contrary," says Dr. Yellowlees, "did these definitions seem to what justice required in the case, that the jury deliberately disobeyed the instructions, and acquitted the man on the ground of insanity."

Only a few days intervened between the murder by Tierney and that by Blamfield, and their trials were nearly co-temporary; but the Scotch are a thinking, shrewd and progressive people; the English cling to antiquity and plum pudding.

Dr. Yellowlees makes one observation which appears to me deserving of serious consideration by the framers of our criminal law. He says, "I am unable to see why, in a case like this, (Tierney's) the wife's testimony should not be admissible as to the past history of her husband. Let her statements be carefully tested, and let there be such reservation or deduction in receiving them as the other evidence seems to demand; but it appears strange deliberately to reject the witness who must be the best informed as to the history and habits of the accused."

Never were more sensible words than the above written. Every physician who has been called upon to treat a case of insanity in either a husband, a son, or a daughter, well knows the vast importance he attaches to the statements of the wife or mother. Who, so well, so intimately, so minutely *can* be acquainted with all the guiding, instructive and most important facts, an accurate knowledge of which is indispensable alike to the diagnosis of the case and its judicious treatment? And yet in the case of a husband accused of any offence whatever, British jurisprudence seals the lips of the very witness whose testimony might throw a flood of light on the great psychological difficulty! I can affirm from abundant experience and observation that in the cases of husbands, sons and daughters, I have found the details given me by wives and mothers, though sometimes almost tiresomely exuberant, yet unspeakably

valuable. I venture to say that physicians examining husbands alleged to be insane, seek in every equivocal or obscure case, for the most reliable information from the wives.

I have never allowed the consideration of McConnell's doom to weigh one straw in my expression of opinion as to his mental condition. He is in the hands of an enlightened representative of a just, wise, and God-fearing Queen. If royal elemency be extended to him, I shall be thankful; if it is withheld, I may regret it, for the grave will not reveal my error of belief, and no man should be ashamed to confess his mistakes, "which is," as a great writer has said, "but to acknowledge that we are wiser to-day than we were yesterday."

But whatever disposal may be made of McConnell, of the propriety of one requirement I am overwhelmingly convinced; he never should have an opportunity of committing another homicide, be he sane or insane; for, sane or insane, he is a dangerous man; more dangerous, in my belief, if insane than if sane.

In taking leave of this painful, though to me, in a scientific view, deeply interesting subject, I cannot refrain from assuring the numerous friends of the lamented Mr. Mills, of my heartfelt sympathy in their bereavement. To plead for truth and dispassionate judgment is one thing; to excuse or palliate *actual* crime is quite another. If what I have written will but awaken thoughtful inquiry on the momentous question of the responsiblity of the mentally diseased, I shall think very lightly of all the rash and harsh words that have been written or uttered against me.

JOSEPH WORKMAN, M. D.

Toronto, 28th Feb. 1876.

To the Editor of the Canadian Journal of Medical Science.

MR. EDITOR,—Will you ask Mr. McKim, the janitor of the University, if he will please give me a certificate of character for sobriety, &c., as I wish to apply for the position of Examiner for the Medical Council next year.

Yours, &c.,

MEDICUS.

P.S.—Just tell him it was not I who vomited on the carpet of the Chancellor's room during the recent examinations.

M.

Miscellaneous.

WOUNDS IN RELATION TO THE INSTRUMENTS WHICH PRODUCE THEM.—The *Glasgow Medical Journal*, for Jan. 1876, contains some interesting investigations on this subject by Dr. Wm. Macewen. Seventy-one cases, and one hundred and four wounds, produced by fifty-one different kinds of articles are detailed. Most of the wounds noted were seen within a short period after their production, while they were yet fresh and bleeding. The greater number were brought to the central police station in Glasgow.

The following conclusions are formulated by Dr. Macewen from the examination of these cases :—

"1. Blunt instruments sometimes produce scalp wounds, having straight outlines and sharp clean edges, which in these respects could not be distinguished from wounds produced by sharp-cutting instruments.

"2. Scalp wounds, which exhibit entire hair bulbs projecting from the surface of their sections, have been produced by a blunt instrument.

"3. Wounds, exhibiting nerve filaments or minute blood-vessels bridging the interspace between the lips of the wound, toward the middle of the depth of the section, while the tissues have receded all round them below as well as above, have been produced by blunt non-penetrating instruments.

"4. When a wound, even with sharp well-defined margins, bears in contour a resemblance to an osseous ridge in close proximity, there is a *probability* that it was produced by a blunt instrument through forcible impact against the underlying osseous ridge.

"5. *Cut* hairs found in the immediate vicinity of a wound are valuable aids in determining whether a sharp or a blunt instrument has been made use of.

"6. As to the diagnosis between wounds produced by instruments of the knife kind and other sharp-edged substances, such as glass, earthenware, etc., no dependence can be placed on the mere regularity of outline or sharpness of edge, or the reverse.

"7. Sharp clearly-defined wounds in certain cases present peculiarities in their terminations which may be sufficient to enable a probable diagnosis as to whether they were produced by a knife or a portion of glass or earthenware.

"8. The same instrument, used by the same person in delivering several successive blows, may produce wounds of different characters."—*Monthly Abstract.*

Examinations of the College of Physicians and Surgeons of Ontario.—*Primary Examination.* — John Armour, Thomas H. Ashby, N. H. Barkwell, William D. M. Bell, G. H. Bowen, W. H. Burton, Duncan H. Cameron, Arthur Dalziel Campbell, Gilbert Cannon, Charles E. Carthew, C. K. Clarke, Alexander Davidson, Jonathan Day, Fred. J. Duggan, John Dunfield, M. Esmond, Alexander Fraser, J. W. Good, H. S. Griffin, Kenneth Henderson, William Honeywell, Andrew Hourigan, B. Andrew, James B. Howell, David Jamieson, George Kennedy, G. A. Marlatt, A. H. Miller, L. F. Miller, Thomas M. Miller, Henry Minshall, G. T. McKeough, Eugene McNichol, M. D. Oakley, R. B. Orr, W. T. Parke, D. Phelan, W. Parker, R. A. Ross, A. F. Pingle, V. A. Routledge, (*Homœopathic*), S. T. Scovill, James A. Sinclair, Thomas Smellie, William G. Stark, R. M. Stephen, Duncan Stewart, Marshall Sutton, F. B. Wilkinson, W. E. Winskell, — Wood, W. F. G. Grant, (1st year's examination); all the foregoing candidates passsd without any oral examination :—T. M. Dumble, D. M. Faulkner, Byron Field, S. H. Glasgow, Peter Graham, Andrew Grant, F. S. Holmes, Edward Kitchen, W. A. Munro, A. H. McKinnon.

Final Examination.—Albert C. Bowerman, Wesley Jones Burns, Alexander Douglas, Wm. Douglas, John William, James Fulton, Walter W. Geikie, W. Hanover, H. G. Lachner, Jas. Munro, John B. Murphy, R. Mylius, Stewart McArton, Archibald McCurdy, James McWilliam, L. M. Mackie, William Nichol, J. B. Phelan, H. H. Pringle, R. W. Powell, Jno. W. Smith, Malcolm Stalker, Dougald Stewart, W. F. Strangways, Archibald B. Taylor, Robert Shaw Tyrell; the foregoing passed without an oral; William Adams, J. E. Birdsall, Fred. C. Cluxton, J. W. Gray, Tiffany Heartwell, Benj. Hickey, Elijah Jackson Jessop, J. S. King, Alexander Kennedy, — McBean, Henry McCrea, John McLean, Thomas Potter, Levi Secord, John P. Sivewright.

Iodoform in Otorrhœa.—Dr. Heustis remarks that he has found a mixture of iodoform ʒj, and glycerine ʒj, most excellent to drop in the ear in cases of otorrhœa.

Post-Mortem Examination of the Body of Sarah Maria Barry.

Thorax: Both lungs congested, especially at the posterior part. They floated when entire, but small portions from the posterior part were consolidated, and sank when separated from the rest of the lung. Mucous membrane of trachea and bronchial tubes very red, thickened and inflamed.

Heart: Normal.

Abdomen: Viscera covered with semi-purulent lymph; grumous decomposing matter exuding from pelvic cavity; liver very dark and friable; kidneys, spleen and bladder normal. On the posterior surface of the uterus a ragged, ulcerated opening with everted edges. This opening communicated with the uterine cavity. The diameter between the outer edges was 3 inches. (The opening being $1\frac{1}{2}$ inches across, and the everted edges $\frac{3}{4}$ inch thick each.) Lying on this ulcerated surface was a small mass of partially decomposed substance, believed to be placenta. In the vagina, on the posterior wall, about one inch from the os uteri, was an ecchymosis about the size of an English sixpence; a larger one was found in a similar position on the right side. In the position usually occupied by the os uteri, two openings were found, separated by a superficial transverse band a little thicker than a match. Owing to decomposition it was impossible to state positively whether one of these openings was or was not caused by laceration. On the posterior portion of the inner surface of uterus, below the opening before described, was found a partially attached portion of a substance similar to that found lying on the edges of the opening. Length of uterus on external surface $5\frac{1}{2}$ inches. Breadth between fallopian tubes 3 inches. The walls at the fundus about $\frac{5}{8}$ inch thick. Weight about $5\frac{1}{4}$ ounces. Upper surface of left ovary somewhat eroded —on its surface a prominence was seen which seemed from external appearance to be a corpus luteum about the size of a coffee bean. The ovary was so blackened by decomposition that on section of this prominence no definite characteristics presented. Right ovary more firm, but without anything resembling a corpus luteum.

Trinity College Medical School.—The following gentlemen have passed their primary and final examinations in this University :—

For M.B., :—W. A. Adam, W. J. Burns, W. J. Douglass, A. Douglass, J. Fulton, W. C. Freeman, W. W. Geikie, R. J. McKinnon, S. McArton, A. McCurdy, J. McWilliams, A. R. Pingle, J. W. Smith, W. S. Strangways, J. Stalker, J. P. Sivewright, A. B. Taylor, W. S. Washington. Primary :—T. H. Ashby, H. A. Bonnar, R. H. Barkwell, A. Davidson, J. Dunfield, J. Fulton, P. L. Graham, W. Honeywell, A. H. Miller, G. A. Marlatt, T. M. Miller, M. Macklin, C. T. McKeough, J. McWilliams, H. Minshall, G. O'Connor, H. H. Pringle, W. Parker, R. A. Ross, W. G. Stark, D. A. Stewart, R. M. Stephens, J. A. Sinclair, M. Sutton, W. Tisdale, and W. E. Winskell.

Honor Men :—University Gold Medallist—J. Fulton; University Silver, do.—J. McWilliams; Faculty Gold Medallist—W. J. Douglass; Faculty Silver do.—J. Stalker.

Certificates of honor were awarded to the following gentlemen :—Final :—W. S. Washington, J. W. Smith, A. Douglass and W. J. Burns. Primary: D. A. Stewart, R. M. Stephens, J. Dunfield, A. Davidson, R. A. Ross, M. Sutton, W. Tisdale, W. Honeywell, J. M. Miller, W. G. Stark, J. A. Sinclair and A. H. Miller. First Year's Scholarship ;—J. D. Bonnar and H. Meek. Second Year's Scholarship ;—H. A. Bonnar and G. T. McKeough.

D. A. Stewart receives the recommendation of the Faculty to the Trustees of the Toronto General Hospital, for the position of resident hospital assistant for one year.

Rapid Diminution of a Remarkably Large Spleen Under the Hypodermic Employment of Ergot.—In the *N. Y. Med. Record* for April 15th, is reported a case of enlarged spleen where very gratifying results followed the hypodermic use of Ergot, after the failure of remedies usually employed in such cases. The first injection was made Feby. 6th, continued daily, with the exception of the 9th, until the 14th of the month, at which time we are assured the spleen was normal. The author of the article does not inform us of the preparation or dose made use of.

The College of Surgeons and its Midwifery Board.

The following letter appears in the *Medical Times and Gazette*, of March 25th :—

To the President, Vice-President, and Council of the Royal College of Surgeons, England : Gentlemen,—The duty imposed upon the Midwifery Board to examine for the College licence on Midwifery "persons" who shall not be required to submit to an adequate examination in medicine and surgery, has compelled me to reconsider my position as a member of that Board. The Council calls upon the Board to aid in placing on the Medical Register "persons" possessing only fragmentary medical skill, but who will, notwithstanding, acquire a practical, if not a legal right to practise far beyond the limits of their qualification. Knowing, as I do, that obstetrics is an integral part of medicine; knowing that it cannot be rightly understood or safely practised without a fair knowledge of the other parts of medical science, and feeling deeply the injustice and danger of making women and children the subjects of inferior medical skill, I cannot reconcile it to my sense of right to assist in carrying out the College Charter in the spirit expounded by counsel. With extreme regret, but without hesitation, I resign the office of Examiner in Midwifery to your College.

I have the honor to be, Gentlemen,
Your most obedient servant,
Robert Barnes.

Grosvenor Street, March 16, 1876.

The Normal Digestion of Infants.—The most important conclusions which Dr. Wegscheider (*vide Centralblatt*, No. 3, 1876,) draws from his researches on the fæces of infants in relation to their digestive functions, are the following :—(1) The albuminous constituents of the milk are completely absorbed; (2) the white residue which is found in the fæces, and is usually regarded as casein, is not casein, but chiefly fat, with some admixture of intestinal epithelium; (3), the unabsorbed fats leave the bowel partly as soaps, partly as free fatty acids, and perhaps partly as unaltered fat; (4) urobilin and unaltered bilirubin occur in the fæces, and biliverdin is also found in diarrhœal stools.

Propagation of Typhoid.—At Sedgeley Park School forty-two boys became affected with "genuine typhoid." No nurse, no master, servant, or adult of either sex was attacked. Why? They all lived in the same house, drank the same water, ate the same food, cooked in the same way, and several of the masters slept in the same dormitory with the boys. The boys, however, used closets opening into a cesspool emptied in the holidays. These had been used a hundred years and no injury had resulted. A boy one day complained: he had been only four days at the school. His illness turned out to be typhoid. All his evacuations were thrown into the cesspool of the closets which the boys used. All the masters, servants, &c., used closets at a distance. Hence the difference; the boys used closets in the cesspool of which typhoid evacuations were passed, and forty-one, besides the first case, had typhoid fever. The masters and servants used other closets and did not suffer. The first case had been only four days in the school, and had therefore caught the disease elsewhere. Two years before a different kind of outbreak had occurred in the same school. This time, masters, servants and boys were all affected "indiscriminately." There was diarrhœa, sickness, great languor, and much prostration. Seventy persons were attacked. The water was found contaminated with sewage from a drain leaking into the well. This was remedied, and the disease ceased forthwith. It was not typhoid fever, but another gastro-intestinal attack. During the next two years the health of the school was satisfactory.—*Practitioner.*

Chloral Suppositories.—The production of a chloral suppository containing a sufficient proportion of this drug to cause sleep has heretofore been deemed impossible. Mr. H. Mayet, in the *Druggists' Circular*, has, however, devised the following formula, by which he manages to get forty-five grains of chloral in each suppository:—

℞. Ol. theobromæ,		gr.xxv
Cetacei,		
Pulv. chloral,	āā	gr.xlv.

For one suppository.

These suppositories are of good consistence, and may easily be put into use.

Wall's Method of Giving Cod-Liver Oil.—Prof. O. A. Wall, in a communication to us for April, 1874, suggested the following new and valuable method of administering cod-liver oil, which, in consideration of its importance, we take the liberty of republishing:

"I lately had occasion to prescribe cod-liver oil for a lady patient, but after having unsuccessfully tried the various plans usually recommended to render this oil less obnoxious to the taste, the patient refused to continue the use of the medicine. I then tried the following plan, which answered the purpose admirably and is an excellent method of giving the oil: Cut a wafer (such as is sold in drug stores for the administration of nauseous powders, pills, &c.) into pieces about three inches square, moisten one of these pieces and place it into a deep tablespoon, then pour a dessertspoonful of oil upon the wafer and fold the edges carefully over the oil, fill the spoon with lemon syrup, or if preferred, with syrup of lactophosphate of lime, with which all sides of the wafer must be moistened. Then let the patient swallow it at one gulp and it will pass down without other taste than that of the syrup. If taken soon after a meal, the oil becomes mixed and is digested the food, and the disagreeable regurgitation of the oil is completely avoided. I think this method will be found useful when the patient cannot otherwise take the oil."

In the *Practitioner* for August, 1875, Dr. Jas. Sawyer writes that he has rarely found gelsemium fail to give decided and lasting relief in cases of neuralgic pains in the face and jaws associated with carious teeth. He usually gives 15 minims of a tincture prepared as follows:—Take of gelsemium root coarsely powdered 2oz., of rectified spirit 20oz. Moisten the root with 10oz. of the spirit, and allow the mixture to stand for 24 hours. At the end of that time pack in a percolator, and add the remaining 10oz. of spirit. When the fluid has ceased to flow, remove the contents of the percolator and press them. Add the pressed liquid to that obtained by percolation, filter, and make up with rectified spirit to a pint. Eleven minims of this tincture are equal to about one grain of the root.—*Edin. Med. Journal.*

Bromhydrate of Quinine.—This preparation (*Gaz. Hebd.*, Febuary 18, 1876, and also *Gaz. Hebd.*, September 17, 1875) has been recommended by M. Gubler as having especial properties, independent of those of bromine or of quinine, apparently the result of the combination. The drug has the same effect as sulphate of quinine, but it acts less on the auditory apparatus. M. Soulez (*Journal de Therapeutique*, December 10, 1875) finds that the bromhydrate is effective where the sulphate has failed; also, that its action is more rapid; if given one hour before the time of chill, the access of the chill will be checked. It is much more soluble than the other salts of quinine, and can be used, therefore, more readily, subcutaneously.—*N. Y. Medical Journal.*

Royal College of Physicians and Surgeons, Kingston.—The following gentlemen have passed their primary and final examinations in this institution:—Primary—G. H. Bowen, J. Day, T. H. Dumble, F. L. S. Holmes, A, B. Hourigan, R. Henderson, H. A. M. Hubbs, E. M. Higgins, L. F. Miller, E. C. McNichol, D. Phelan, and S. S. Scovill; Final—G. H. Care, R. A. Davies, A. Kennedy, J. B. Murphy, S. Porter, and J. McGourex.

French Medical Deputies.—The total number of medical men elected as deputies to the present National Assembly on Feb. 20 and March 5 amounts to 44, thus constituting a very large representation of the medical profession in that body.

Drs. Ringer and Murrell, in their experiments on the physiological action of *Gelseminum*, finding that the drug so profoundly depresses the functions of the cord, thought that it would prevent or arrest the tetanic convulsions produced by strychnia. They experimentally determined that such was the case.—*Lancet.*

Sir George Burrows, from increasing professional engagements, having declined the honour of re-election, J. Risdon Bennet, M.D., Edinburgh, F.R.C.P., London, F.R.S., has been elected President of the Royal College of Physicians, London.

Appointments.—Chamberlin Arthur Irwin, Esq., M.D., of Wolfe Island, to be an Associate Coroner in and for the County of Frontenac. R. C. Butler, Esq., M.D., of the village of Kirkfield, to be an Associate Coroner in and for the County of Victoria.

Births, Marriages, and Deaths.

BIRTHS.

At Delaware, Ont., on the 9th inst., the wife of A. MacLaren, M.B., etc., of a daughter.

DEATHS.

At 57 Adelaide Street, Toronto, on April 4th, Lizzie Isabel, daughter of Uzziel Ugden, M.D., aged 15.

In London on the 21st inst., Ellen Rae Campbell, infant daughter of Dr. A. J. Campbell, aged 9 months and 20 days.

At London, on the 23rd April, of typhoid pneumonia, Annie Edith, youngest daughter of Dr. Oronhyatekha.

VIRGINIA MEDICAL MONTHLY.

LANDON B. EDWARDS, M.D., - - Editor and Proprietor.

Member of Virginia State Board of Health; Lecturer Materia Medica, Medical College of Virginia; Secretary of Medical Society of Virginia, etc.

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IRA W. BLUNT, Agent, Valentine's Meat Juice.

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——— WM. BRODIE, M.D., Detroit, Mich.

Valentine's Meat Juice has, in my hands, served a more valuable purpose than any other similar preparation. ——— S. M. BEMIS, M.D., New Orleans, La.

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——— Prof. Surgery, Va. Med. College.

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AND. McFARLAND, M.D., Supt. Oak Lawn Retreat, Jacksonville, Ill.

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I consider the contents of your little bottle most invaluable in all acute and wasting diseases.
W. M. FITCH, M.D., Charleston, South Carolina.

THE

Canadian Journal of Medical Science.

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TORONTO, JUNE, 1876.

Selections: Medicine.

CLINICAL DEMONSTRATIONS OF PHTHISIS.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

BY JAMES EDWARD POLLOCK, M.D., F.R.C.P.

Senior Physician to the Hospital.

LECTURE II.

GENTLEMEN,—When we last met we considered how far the modern pathology of tubercle and a clinical observation of phthisis can be made to agree. Theories change, and the fashion of the time, moulded, it may be, by the discoveries of the *jeunesse* of medicine, but the disease ever under your eyes has probably not altered from the days of Hippocrates till now. Its clinical varieties are well worthy your study, and, although you may not be able to tell at a glance the future of each, still there is a natural classification which will enable you to discriminate and assign fair reasons for your opinion. This knowledge is not to be found in a sorting of your cases into bundles, with a name attached to each, but rather to be sought in a careful clinical study. Thus you will find it abundantly demonstrable in these wards that there are many varieties of consumption, some of which become indefinitely prolonged, either from an inherent slowness to destructive change or because the local disease is limited, and the morbid action exhausted, as it were, in one circumscribed deposit, while others favour alterations in lung-tissue which convert its structure into an impervious mass, little influenced either by further inflammatory action or new deposits of morbid matters. Thus the *nature of the morbid products* in the lung is of primary importance in your prognosis, and the fact of the origin of the attack in acute inflammatory or in slower insidious forms of disease. Again, there are modifying agents which shape, as it were, the progress of the affection; and these are found in the age and constitution of the patient, in the build and shape of his chest, in the diffusion or massing of the deposit in the lung, and in certain of the occasional events of phthisis, such as profuse hæmoptysis. I shall dwell on all of these, and show you specimens of each variety, and shall ask you to take good notice of the fact that some individuals evidence, by their plump, well-nourished condition, how tolerant the system may become of a very considerable amount of local disease, while others nearly perish from the constitutional irritative fever due to an affection, it may be, of one lung, limited in extent, but undergoing rapid softening.

The natural divisions of phthisis are, therefore, more numerous than the old three stages into which it was formerly divided; yet it is necessary to consider these, although they are erroneous guides to prognosis, inasmuch as they do not mean all that they appear to do. Many patients have strayed out of the condemned divisions, and in the third (and "last") stage have laughed at their doctors and proclaimed the fallacies of the "faculty." Patients will live with cavity in the lung for an indefinite number of years, or such an arrest of symptoms may occur in any stage as shall give time for a recovery of the nutritive processes. Only keep off the inflammatory attacks (for inflammation plays the most important part in the whole his-

tory of consumption), and if your patient preserve a healthy digestive system the stage of the disease is unimportant. Yet let us briefly examine these stages, which have their use and must be retained for purposes of study and accurate description, but do not mistake their meaning. They refer only to a state of lung, and not to a state of health. The *first* is the period of deposit or thickening of the lung, the *second* that of softening or disintegration, and the third that of *cavity*. The *first stage* of established disease of the lung—recognizable, that is, by physical signs denoting alterations in its structure—means such a block of a portion of the organ as shall render it less pervious to air. Hence the natural resonance which it gives on percussion is lost, the *intensity* of the air-sound as it enters is diminished, the *character* of the breath-sound is altered by the changed elasticity of the alveoli and minute tubes, and the air leaving the lung on *expiration* gives a more prolonged tone. The natural resonance of the voice and cough in the bronchial tubes is intensified and more directly conveyed to the ear, because the elastic and air-containing tissue of the lung is replaced by a solid medium which is a better conductor. It is obvious that this condition may be due to several causes either within or without the alveoli which have become closed up and impervious to air. An ordinary catarrhal pneumonia, resulting in proliferation of epithelial growth, will produce such an *intra-alveolar* block. The ultimate vesicles of the lung are filled up, the elasticity of their containing walls is destroyed, and what is called vesicular breathing is at an end, the entering air, when it reaches the ultimate bronchioles, being unable to penetrate further. Thus it is that the soft, gentle sound of pure respiration, which we hear in a healthy lung, is lost, and if the lung-block be considerable the breath-sounds are of necessity bronchial, being, in truth, only formed in the tubes, and not in the ultimate vesicles. It is safe to say that a large proportion of the cases which end in phthisis, or ulcerated lungs, begin in this way, by catarrhal products blocking the alveoli of a portion of the lung; and if you were to cut down on this diseased spot, you would not find the grey, semi-transparent granules of Bayle, but the products of an inflammation. They have the same clinical history, but such alterations in the lung are not tuberculous, although you will find in practice that if not speedily liquefied and expectorated they either become caseous, and soften, breaking down the alveolar walls and ulcerating the lung-tissues, or, in certain cases, undergo the cretaceous transformation and become obsolescent. But, again, this pulmonary block may be *outside* the alveoli, and in that interstitial tissue which is spread through the lung—peribronchial and perivascular—that is, surrounding the vessels and bronchi, the *adenoid* or lymphatic tissue described by Dr. Burdon-Sanderson. It has been well demonstrated that it is capable of overgrowth from irritation, and in such circumstances it ceases to be the fine soft bed in which vessels are contained, and hardens, thickens, and compresses both the bronchi and alveoli, causing the collapse of the latter. The vessels are also enwrapped, as it were, lessened in calibre, and the circulation, both of air and blood, interrupted. In a later stage, as I shall show you, this process ends in producing what is called fibroid alterations, which both harden and contract the lung. This first stage of phthisis, then, consists in a block of the lung; and two causes can produce it—the intra-alveolar plugging by the products of inflammation, and the extra-alveolar pressure by the natural interlobular tissue becoming thickened. A third cause is more rarely found in what are called "dust" cases—the dust of coal-mines, factories, and potteries becoming impacted in the alveoli, and mechanically blocking the lung; and this is invariably accompanied by an overgrowth of the adenoid and fibrous tissues, and all such cases, when chronic, belong to the class of fibroid phthisis. Let us consider these causes of lung-block clinically. You may not be called to see the first approaches of such a case, but very often indeed you will find a patient with this history and physical condition of a part of one lung, generally the apex. He will tell you that he has had cough after taking cold some weeks or months previously. A feverish cold, with pain in one subclavicular region; cough, slight greyish starchy expectoration, some emaciation, and generally depressed health. On examina-

tion you find the chest-walls slightly flattened to the second or third rib, lessened expansion, slight dulness, and deficient breath-sounds. There may be a whiffy character of respiration, and slightly increased vocal resonance. What is this case? I believe it to be one of *severe alveolar catarrh:* the vessels have been blocked by large granular cells which have undergone fatty degeneration and been expectorated. But the walls of the alveoli have been damaged and collapsed, and a portion of lung is permanently blocked. This is not a tubercular case, and your patient may remain for years with the same physical signs, and without extension or even renewal of disease. We meet with them every day in practice. They are delicate, but perhaps have no cough. Yet they should live with care, for they carry with them a liability. Either a second attack may occur in a different part of the lung, or the old nidus of disease in the apex may break up, and the degenerated product be carried into the circulation, and the patient be inoculated with morbid matter, resulting in a second deposit, with accompanying hectic and all the history of phthisis. The above symptoms may also, no doubt, approach insidiously, and with premonitory conditions obscure but intelligible to the observant; and this early stage has been much dwelt on. I have long believed that there are symptoms before there are physical signs, a systemic or constitutional condition before any local disease exists; and a very serious question arises here. Do the whole train of symptoms in phthisis, the hectic irritative fever, sweating, waste, and exhaustion, only depend on a localised lung disease, of which they are the reflection, and which stands to them in the relation of cause to effect, just as the diseased joint gives rise to suppurative hectic? or is there a primary constitutional disorder, of which the local disease is only a sequence, expression, and result? Would a healthy person ever have such an alveolar catarrh as I have described, resulting simply from a neglected cold, and without any previous disorder of health? It is true that by far the most important agent in precipitating lung disease is inflammation; but is the inflammation itself idiopathic, or has it arisen out of a previous condition of blood or tissues which have impressed on it a stamp and form, and made it not quite what we call a healthy inflammation? For there is a healthy inflammation, as you know, and is this it? "Certainly not," you reply, "the products of healthy inflammation are temporary, plastic, removable, not permanent, ill-vitalised, degenerative, like these blocked alveoli." Then why is it so? We all go through our severe colds and outlive them. Whence this insidious filling of the lung with epithelium granules, tubercle—what you will? or this acute localised patch of deposit after a few weeks' fever, which will not organise, nor resolve, but remains to degenerate, ulcerate, waste? It is true that the fever in phthisis is generally a measure of the irritation of the lung, but is there no fever premonitory and leading the way to these lung alterations? I must answer in the words of Latham: "Pulmonary consumption is only a fragment of a great constitutional malady, which it belongs to a higher discipline than any mere skill in auscultation rightly to comprehend." And as regards premonitory symptoms, I ask you to regard with much anxiety and grave care *the union of subfebrile symptoms with progressive waste of the body.* Here is danger without any physical signs, but if the latter be superadded you have lung disease, and localised lung disease with fever is catarrhal pneumonia, tubercle, hyperplasia of adenoid—what you will, but, above all, it is phthisis.

In studying such a case you must exclude several causes which might mislead you. Emaciation may be due to dyspepsia, and cachexia from syphilis, diabetes, chronic abscess, joint affections, and fever, as well as other alterations of health. In all cases the rule should be to regard moderate fever of the remittent kind and wasting of the body with great suspicion.

Let us just consider the progress of a healthy sthenic pneumonia in contrast. Your patient, hitherto healthy, has been exposed to cold, generally rather severely, and after sweating. He shivers, and has an immediate rise of temperature to 103° or 104°. This is followed by moderate but rapidly-increasing dulness over one lung from the base upwards even to the apex. A fine crepitus succeeds, and the breath and voice-sounds become tubular. Dyspnœa

marks the lessened space for breath and rusty sputa the extreme congestion in the lung. There is little pain, but there is much fever and distress, and the patient has a burning skin and patches of redness on the malæ. On the seventeeth day, or later, a crisis occurs; the temperature drops suddenly, the physical signs alter, the dulness lessens, and a coarse crepitation replaces the fine. In an incredibly short time there is convalesence, and the lung-signs are normal. In this case no one can doubt that the lung-alveoli are blocked by exudation so thoroughly that, in fact, no tissue in the lung is pervious to air except the larger bronchi. But there is speedy resolution; the plastic exudation readily liquefies, resolves, and is absorbed and expectorated. It is plainly not the *extent*, but the *nature* of the lung deposit which is dangerous, and it is equally plain that the alveoli, although blocked and filled up, have not been injured, for we find that the recovery after such an attack is perfect, and the integrity and elasticity of their walls is complete. There is no ulceration of lung at all in the case, and the organ returns to a condition sound and pervious, with free elasticity, a perfect double circulation, and all functions unimpaired. Where, then, is the difference between this sthenic pneumonia and the alveolar disease which I have described as leading to phthisis, nay, as so often destructive of the lung and of the patient? Doubtless it is found in the nature of that diseased product which will not liquefy nor resolve, but preciptates destructive ulcerations of the surrounding tissues. And let us go a step further back, and ask why is not the product of disease a healthy, removable product? why is it low in organization, liable to degenerative change, but not liable to such a complete and rapid form of degeneration as would remove it from its dangerous impaction in the lung? We are compelled here to seek an antecedent cause, which is higher up in the chain of morbid events, and we say, here was a "constitution," or an hereditary predisposition, which caused this inflammatory block in a portion of one lung to be of infinitely greater danger than the inflammatory block of a whole lung in another individual. I wish I could explain this to you; but here are the facts, and they are hard of interpretation, and we are driven to obscure terms like "diathesis" to cover our ignorance. But do not mistake me; up to this point all is clear, but behind it lies the field for future advances, and perhaps a lessened mortality.

Look at a case of unresolved pneumonia, and you see "phthisis." Such a case has generally not been sthenic, the temperature has not been excessive, and there have been variations looking like recovery. The dulness has not been complete, but in patches and the locality of these patches has partially changed; one has cleared up, only to be replaced by another. The rusty sputa are rarely seen. I have said the pyrexia was less marked, but the fever changes its character into a slow remittent with the diurnal variation of phthisis; low temperature in the morning, and 103° in the evening. At the end of two or three months the case has not cleared up, and your patient is weak, emaciated, and has night-sweats. His lung (one lung) may be dull in parts at the base, much more rarely at the apex or in the middle near the root of the lung, and not only is the breath-sound tubular, but there is crepitus here and there. The medical attendant is alarmed, and with reason, and says he would gladly have exchanged such a case for a true active pneumonia with much fever and high temperature, and complete block of a whole lung. In this opinion he is right. He will ask you anxiously in consultation if this be tubercle. I care not for names. It is a deposit in the lung which will not resolve, and which threatens to destroy the alveolar walls and to give rise to the train of symptoms which indicate ulcerated lung-tissue. I would have you carefully note the small portion of lung engaged as compared with a sthenhic pneumonia, the deficiency in the resolution of the local disease, and the passage of pyrexial fever into hectic. Now we have brought our comparison of cases and our reasoning on them to this point, that the difference between the unresolved pneumonia and the catarrhal block of the alveoli or the old localised deposit of tubercle - call it which you will—is in the nature of the product extended into and around the alveoli, and not in the extent of lung engaged. For in the first case you have a commencing

phthisis, and in the latter you have a very acute disorder, with ten times the amount of local mischief, and yet complete recovery is almost sure to follow. Histology will not unravel the difference between the two cases, and it will not do to look through a microscope or listen through a stethescope for the cause. The histological appearances and the physical signs are nearly identical in the two cases, and hence I ask you to examine deeply and carefully into the vital phenomena and the antecedent history of the two cases, and trace how the feeble constitution with inherited tendencies produces a distinctive product in the lung, and how the healthy is enabled to battle against an infiltration of a whole lung successfully.

It was perhaps best to consider these questions while examining what has been called the first stage of phthisis, or that which is characterized by a morbid product in a portion of the lung. If we could define the pathology of this stage, we should have accomplished the most difficult part of our task.

One symptom to note in phthisis is, that not unfrequently an hæmoptysis ushers it in; and it is true that some of the more rapid forms of phthisis are so commenced. A patient, overworked, it may be, or enfeebled by anxiety or other depressing agents, will bring up a mouthful of blood, and soon present all the physical signs and the fever and waste of phthisis. In such an event you must watch the temperature and pulse quite as much as the physical signs, and if much fever, with an evening temperature of 102° or 103° prevail, and morning sweats, the case is likely to be rapid in its changes for the worse, even without pause, till a cavity is formed; or progressive softening of the lung may occur, and the case become one of galloping consumption. This event is to be looked for, but is not an invariable sequence of a rather profuse hæmoptysis occurring as an early symptom. Its meaning is undoubtedly great congestion of the lung, and we must remember that rapid softening occurs often. Either inflammatory products block the alveoli, or, as has been said, retained clots of blood form the nuclei of degeneration, and in their changes involve the lung-tissue itself.

Not all these cases so initiated do badly, but many pass into the chronic stage, exhibiting little tendency to degenerate or ulcerate the lung, and the symptoms, although primarily severe, may subside, and leave only the signs of a quiescent block of a portion of lung, while the patient recovers a fair condition of health. An hæmoptysis depletes the lung and relieves the congestion, as I shall have occasion to point out to you again, and its occurrence is often followed by a long period of quiescence or latency of disease.—*London Lancet.*

HOW TO CURE A COLD IN THE HEAD.

BY DAVID FERRIER, M.D.,

Assistant Physician to King's College Hospital.

Though a cold in the head gives rise to much discomfort and uneasiness, it is not usually considered grave enough to necessitate professional advice; and the unfortunate victim of nasal catarrh, with watery eyes, running nostrils, sneezing, and nasal speech, is more often regarded as a subject of ridicule rather than of sympathy or commiseration.

Being occasionally liable to severe nasal catarrh, often of prolonged duration, and having a lively sense of the inconvenience and discomfort attaching to it, and being threatened with a cold in the head one evening lately, with prospect of serious inconvenience to public speaking next day, I endeavoured to devise some plan of treatment more speedy and efficacious than the usual one of "sudorifics and lying in bed." Having succeeded almost beyond my expectations, and having since found the method equally successful in the case of others to whom I have recommended the treatment, I offer it in the hope that it may prove equally efficacious in the hands of others. As the local symptoms of cold in the head are the chief source of annoyance and discomfort, local treatment seems the most rational.

The symptoms being those of acute catarrh of the nasal mucous membrane, the treatment which seemed to me most likely to succeed was that which I have always found most efficacious in acute catarrh of the gastric mucous membranes. In the acute catarrh of alcoholism accompanied with profuse secretion of mucus, which is often vomited up in large quantities

almost without effort, as well as in the more chronic forms of gastric catarrh, bismuth alone, or in combination with morphia, acts almost like a specific.

On the same principle the topical application of bismuth to the nasal mucous membrane seemed to me the plan most likely to be followed by beneficial results. I do not know whether the plan is absolutely original, but I am not aware of its having been adopted previously. This, however, is of no importance compared with the question of its efficacy.

On the evening in question I began to suffer with symptoms of cold in the head—irritation of the nostrils, sneezing, watering of the eyes, and commencing flow of the mucous secretion. Having some trisnitrate of bismuth at hand, I took repeated pinches of it in the form of snuff, inhaling it strongly, so as to carry it well into the interior of the nostrils. In a short time the tickling in the nostrils and sneezing ceased, and next morning all traces of coryza had completely disappeared.

Bismuth alone, therefore, proved quite successful, but it is better in combination with the ingredients in the following formula Bismuth by itself is rather heavy, and not easily inhaled, and it is, moreover, necessary that it should form a coating on the mucous membrane. It is, therefore, advisable to combine it with pulv. acaciæ, which renders the bulk larger and the powder more easily inhaled, while the secretion of the nostrils causes the formation of an adherent mucilaginous coating, of itself a great sedative of an irritated surface. The sedative effect is greatly strengthened by the addition of a small quantity of hydrochlorate of morphia, which speedily allays the feeling of irritation and aids in putting a stop to the reflex secretion of tears.

The formula which I find on the whole the most suitable combination of the ingredients of the snuff is as follows :—Hydrochlorate of morphia, two grains ; acacia powder, two drachms ; trisnitrate of bismuth, six drachms. As this is neither an errhine nor a sternutatory, but rather the opposite, it may be termed an anti-errhine or anti-sternutatory powder. Of this powder one-quarter to one-half may be taken as snuff in the course of the twenty-four hours. The inhalations ought to be commenced as soon as the symptoms of coryza begin to show themselves, and should be used frequently at first, so as to keep the interior of the nostrils constantly well coated. Each time the nostrils are cleared another pinch should be taken. It may be taken in the ordinary manner from between the thumb and fore-finger, but a much more efficacious and less wasteful method is to use a small gutter of paper, or a "snuff-spoon," placing it just within the nostril and sniffing up forcibly so as to carry it well within. Some of the snuff usually finds its way into the pharynx, and acts as a good topical application there, should there be also pharyngeal catarrh. The powder causes scarcely any perceptible sensation. A slight smarting may occur if the mucous membrane is much irritated and inflamed, but it rapidly disappears. After a few sniffs of the powder, a perceptible amelioration of the symptoms ensues, and in the course of a few hours, the powder being inhaled from time to time, all the symptoms may have entirely disappeared.

I am writing this note cured of a cold in the head which I began to manifest in a very decided manner last night—viz., weight in the frontal sinuses, tickling of the nostrils, sneezing, watering of the eyes, and commencing flow of the nasal mucous.

I commenced taking the snuff, continuing at intervals for about two hours, thoroughly coating the interior of the nostrils with it. Next morning I found myself entirely free from catarrh. The effects in my own case have been twice so rapid and beneficial that I look with comparative indifference on future colds. In the case of others to whom I have recommended the same treatment equally rapid and beneficial results have followed. One of my students in King's College Hospital described the effects as quite magical and unexpected, having in this way got rid of a cold in one evening. The other day one of the officials in King's College asked me if I could do anything to check a dreadful cold in the head which he had just caught. I gave him the above prescription, asking him to note the results. A day or two after he came and told me that I had given him very marvellous snuff,

as he had not taken more than one-eighth part before he had got rid of all his uneasiness and discomfort. Though I have not yet had very many opportunities of trying this method of cure, the success so far has been such as to warrant my recommending it as a rapid and efficacious treatment of nasal catarrh.—*London Lancet.*

HEADACHES FROM EYE-STRAIN.

BY S. WEIR MITCHELL, M.D., PHILADELPHIA.

Dr. Mitchell avers that the general profession are not fully alive to the need of interrogating the eye for answers to some of the hard questions which are put by certain head symptoms, since many of the patients treated successfully by the correction of optical defects never so much as suspected that their eyes were imperfect. He submits the following propositions :

1. That there are many headaches which are due indirectly to disorders of the refractive or accommodative apparatus of the eyes.

2. That in these instances the brain symptom is often the most prominent, and sometimes the sole prominent symptom of the eye troubles, so that while there may be no pain or sense of fatigue in the eye, the strain with which it is used may be interpreted solely by occipital or frontal headache.

3. That the long continuance of eye trouble may be the unsuspected source of insomnia, vertigo, nausea, and general failure of the health.

4. That in many cases the eye trouble becomes suddenly mischievous, owing to some failure of the general health, or to increased sensitiveness of the brain from moral or mental causes.

The form of head-pain, caused by eye troubles, is rarely of the nature of megrim; and, as it soon disappears when the eyes are corrected, is lacking, happily, in the obstinacy of that distressing malady.

A number of cases are cited to substantiate the above propositions, some of which we epitomize :

Case 1. A prominent merchant first consulted Dr. M. late in the winter for pain in the upper spine and occiput. In the previous autumn, only writing at first, and then later reading, and any near work caused pain. Finally, an over-sensitive state supervened, when a few moments spent in writing would give the patient a creeping sensation up the spine and through the back of the head, followed by giddiness and severe pain. The treatment adopted proved of no avail. Subsequently, the patient consulted an ophthalmic surgeon, who found the vision defective, owing to an optical defect. The proper corrective glasses raised the sight above the average standard, and on using them habitually, the distressing symptoms quickly disappeared. The use of the glasses, without other means, restored the patient to perfect health again.

Case 2. The patient, an accomplished and energetic single lady, aged 30, with heavy household cares, and additional literary work, began some five years previously to have evening headeaches, pain in the back of the head and neck, sense of extreme fatigue, &c., if she persisted in exerting her mind in reading or writing, though without any sense of trouble in the eyes. At last she became feeble, nervous, and anæmic, sleeping little and having almost constant headache, and the use of the eyes caused pain in them and a sense of fatigue. For nearly two years Dr. M. was at fault, but at length referred her to a specialist, April 19, who found the sight impaired, owing to an optical defect, and prescribed the corrective glasses. On May 26, the headache and sleeplessness had gone, patient could read and write without pain ; used her glasses constantly. The relief of the ocular defect sufficed to restore the patient.

Case 3. Patient, a well-nourished intelligent lady, with intense and frequent headaches, usually frontal, without sense of ocular fatigue. Long after the headaches had begun, reading was found to aggravate them, and only rarely to cause fatigue or pain in the eye itself. The correction of an optical defect by suitable glasses gave almost immediate relief, and ere long put an end to the headaches.

Case 4. No eye-pain, but violent headache, described as neuralgic, with nausea and vomitting; optical defect present; prompt and absolute relief by correcting glasses.

Case 5. History of headaches, and later on of vertigo with insomnia; the subjective symptoms subsiding on wearing correcting glasses.

Case 6. Patient, a lawyer aged 51; a long lifetime of active work and constant use of the eyes, but no trouble until one night of intense anxiety gave rise to threatening but brief cerebral symptoms, which at once seemed to make the use of the eyes painful. The cerebral symptoms (vertex headache, excitement of mind, &c.,) were such as to point rather to cerebral troubles than to the eyes as the cause of distress. On neutralizing an optical defect, by proper glasses, entire relief was afforded. A good example of the way in which a permanent unfelt defect is lifted into evil influence by some brief but potent disturbance of the cerebral centres.—*The American Journal of the Medical Sciences.*

THE OPIUM TREATMENT OF DELIRIUM TREMENS.

In the *British Medical Journal*, Surgeon Edward Nicholson writes:—

At the outset of my military life I adopted, for the cases of delirium tremens so common among soldiers, the morphine treatment recommended by Prof. Roser, of Marburg. He pointed out that patients are lost by timidity in not prescribing opium in sufficiently large doses, under fear of poisioning; he advised energetic doses of morphine, commencing with one or two grains, and giving one grain hourly until deep narcotization occurs. I cannot say exactly how many cases I have treated on this plan, but I may say roughly about fifty, and have always found it safe, quick, and attended with the minimum of trouble. I have had but two fatal cases of alcohol poisoning: one was alcoholic apoplexy in a man detained under suspicion of approaching delirium tremens; the other was a man who, having been successfully treated twice within a few weeks, had a third attack of delirium tremens, was brought to hospital in an insensible state, and died in a few minutes after I saw him. Neither of these cases had any narcotic treatment.

In a case of evident delirium tremens I give at once two grains of morphine; in violent cases as much as three grains: this is repeated after two hours if no effect is apparent. A third dose, making a total of eight grains within four hours, has sometimes been required. The patient generally falls to sleep after the second dose, and awakes cured. Sometimes a further small dose (one grain) may be required, but the patient is reasonable, and all trouble at an end.

After quoting some cases in point, he adds:—

These cases show that the danger is precisely in these ordinary doses of opium, and that the beneficial effects are obtained by giving at once such a dose as would endanger the life of a healthy person, and repeating it rapidly until sleep is produced. I may recall Orfila's opinion that "opium employed in strong doses ought not to be ranked among the narcotics or the stimulants; it exercises a peculiar mode of action which cannot be designated by any of the terms at this moment employed in the materia medica." Of course this is meant as applying to the diseased, not to the healthy state. An analogous difference of action is to be seen in the case of ipecacuanha when given in high doses as a remedy for dysentery, or even better in the use of the tincture of digitalis in half-ounce doses against delirium tremens. The digitalis treatment has one advantage—that the remedy is nearly invariably used in the full doses recommended at the time of its discovery: hence its general success. While the morphine treatment, which is, when properly conducted, the safer of the two, is apt to be discredited, in consequence of the substitution for it, by the timid, of the dangerous system of trifling with small or ordinary doses. The digitalis treatment is far more likely to be carried out, and there is little fear of ten or twenty drops being substituted for the proper half-ounce dose. It is to this very plain treatment that I might, perhaps, ascribe the diminished fatality of delirium tremens in the army.

At St. Mary's Hospital there has just occurred a case of recovery from rabies. The boy now is apparently well, and is walking about, but the details are not published yet. The plan of treatment adopted was that of injections of chloral hydrate. The details will be very interesting, and I will refer to them when Dr. Broadbent publishes them.—*Phil. Med. Times.*

A CASE OF CONGESTION OF THE LIVER WHERE PUNCTURE WAS RESORTED TO, WITH RELIEF OF THE SYMPTOMS.

A Burmese convict was admitted into hospital on the 19th of June last, with intermittent fever. On the 22nd of June, while under the care of Surgeon-Major Blanc, of the Indian Army, he showed symptoms of an affection of the liver, that organ being enlarged and sensitive to pressure, and extending some four inches below the tenth rib. The general symptoms accompanying the affection not moderating, but the swelling increasing, it was resolved in consultation, and relying on the favourable report of Professor Maclean, of Netley, to puncture the liver with the needle of an aspirator. Accordingly, needle No. 2 of Potain's aspirator was introduced into the most prominent part of the swelling, which was three and a half fingers' breadth below the right false ribs, and four fingers' breadth from the median line. About an ounce of black blood was withdrawn, in which were mixed a few pus-corpuscles, as shown by the microscope. The operation afforded the patient undoubted relief, the respiration falling from 34 to 26, though the pulse and temperature were not specially influenced, the latter rising two degrees on the day following, but falling to its former standard on the second pay. The liver, however, commenced contracting, and continued to do so for five or six days. About this time general œdema began to make its appearance in the limbs, and becoming general, the patient gradually failed until death occurred, seventeen days after the operation. The autopsy showed that death was due to anasarca, the result principally of excessive fatty degeneration of the heart, while the liver appeared to have nearly recovered its normal condition; so that although the case terminated fatally, the operation was thought to have been beneficial rather than otherwise, the withdrawal of this small quantity of blood relieving the distended hepatic vessels from over-pressure, and so restoring them in a measure to their normal condition.—*The Lancet*, Sept. 25, 1875.

Mr. Campbell de Morgan, Senior Surgeon to the Middlesex Hospital, died from pneumonia on April 12th.

Clinical Studies on Pertussis.—By Dr. Noël Gueneau de Mussy (*'L'Union Méd.,'* Nos. 81, 82, 83 and 85, 1875.) Dr. Mussy here demonstrates a new theory of his own on the mechanism of the convulsive cough which characterizes this disease. According to him every whooping-cough is accompanied by bronchial adenopathy characterized by particular signs, which present nothing special as regards the species of enlargement. It is this lesion which is the determining cause of the spasmodic phenomena, in provoking the excitation of the pneumogastric nerves, and compressing the bronchi. To this anatomical condition the author refers chronic whooping-cough, and all bronchitic affections characterized by fits of painful, fatiguing and obstinate cough, but without respiratory whistling, affections which he designates under the name of "coqueluchoides" pertussoid. Bronchial adenopathy develops from the first period of the disease; but it is especially in the second that it becomes well marked and readily appreciable by the physical means of chest exploration. Dr. de Mussy also attributes to the ganglionic tumefaction the moanings emitted by the patients during sleep, a phenomenon to which he was the first to draw attention, and which he has observed in the absence of whooping-cough when the same anatomical conditions have been present. The way having been opened, Dr. de Mussy develops his ideas on the nature of pertussis; a malady essentially contagious, comparable to the eruptive fevers, always accompanied by a specific exanthem situated in the isthmus of the throat and pharnyx; this eruption disappears towards the end of the third week.—*British and Foreign Medico-Chirurgical Review.*

Chloral Baths in Variola.—Dujardin Beaumets reports that he has obtained excellent effects from general baths of chloral, in cases of confluent variola at the period when the epidermis, detaching itself *en masse*, leaves the dermis exposed. The quantity of chloral used in each bath has not exceeded twenty grammes. In this manner is obtained not only the disinfection of the patient, but also a prompt cicatrization of the skin.—*Bull. Gén. de Thérapeutique*, November, 1875.

Surgery.

SURGICAL DIAGNOSIS.

The following admirable summary on the subject on Surgical Diagnosis, is so little susceptible of condensation that we republish it almost unabridged from the *British Medical Journal* of October 13th, 1875, omitting only the opening remarks. It is from Mr. Christopher Heath.

And now I bring before you a man with no special deformity or ailment, in order that I may be able to show you a few note-worthy points which you can readily appreciate at a little distance, and which will assist you in studying disease and injury in the wards. With his back towards us, you have the opportunity of examining a healthy spine; and you may notice that, while the spinous processes are readily visible in the dorsal region (and particularly when the arms are folded), they are not so visible in the lumbar, and still less so in the cervical, region, where they are covered by muscles and ligament, the seventh, or *vertebra prominens*, being the only one really seen or felt. Here, in a healthy adult, we have the average anterior and posterior curves in the lumbar and dorsal regions; but you must remember that, in young children, the spine is nearly straight, while in disease we may have great exaggeration of either curve. Thus, in the back, we find *cyphosis*, or angular curvature, the result of caries of the vertebræ; while in the loins we have *lordosis*, an exaggeration of the healthy curve, and generally connected with old hip-disease.

The model is now standing at "attention," with his knees straight; consequently the two sides of his pelvis are perfectly even; and you see that a tape carried between corresponding points on the two sides is horizontal. Let us now make him "stand at ease," with the left knee bent and foot slightly advanced, and you see that at once the left side of the pelvis is lowered. But this is not all. Corresponding with the obliquity of the pelvis, we have a lateral deviation of the spine to the left in the lumbar region; and if the man could sufficiently relax his muscles at the moment, we should have a curve in the opposite direction—to the right—in the dorsal region. By placing a book beneath the right heel, and thus increasing the obliquity of the pelvis, I exaggerate the lumbar curve; or, of course, by tilting the pelvis in the opposite direction, I could throw the spine over to the opposite side. Of course, the same thing holds good if the patient be seated instead of standing; for, by tilting his seat, we are able to produce a marked lumbar and a certain amount of dorsal curve at will. Fortunately, we have here to-day also a case of old hip-disease, in whom the obliquity of the pelvis is well-marked, and the resulting twist of the spine better seen than in the healthy subject. You see, then, how important it is in any case of lateral curvature to ascertain whether it depends upon some obliquity of the pelvis (from atrophy of one leg or old hip-disease), or upon other causes; and you also see what effect upon an existing curve may be produced, as has been well pointed out by Mr. Barwell, by raising the side of the pelvis by means of a thickened sole or a sloping seat.

Turning, now, to the neck and shoulder, I pass my finger along the clavicle, which is subcutaneous, and shows its curves well enough in a thin muscular subject. The notch between the clavicles is important in connection with aneurisms of the great vessels of the neck; but the inner end of the bone is very rarely dislocated, except by extreme violence. The outer end of the clavicle is continuous with the acromion process, and I now run the chalk along them; but it may be dislocated (as we have lately seen), and then the flattened end of the bone is readily felt beneath the skin. If I make the man swing his arm round, you will be able to appreciate better than you perhaps have hitherto done the great range of motion in the sterno-clavicular articulation, which, in fact, admits of "circumduction," and has a most important relation to the movements of the arm.

There is no joint, I suppose, about which more more mistakes are made than about the shoulder. An "obscure injury about the shoulder" has often damaged a surgeon's reputation, because he has not sufficiently studied the anatomy of the part to be quite sure of his diagnosis and

treatment. The chalk-line I have already made marks the bony arch formed by the clavicle and acromion; but you will notice that the head of the humerus projects beyond this in front, and gives the roundness to the healthy shoulder. There is a hollow immediately behind the head of the humerus and below the prominent acromion; and another in front, to the inner side of the head, in which the coracoid process can be more or less distinctly felt, according to the muscularity of the subject. In the healthy subject, there is just room to lay the finger between the coracoid process and the head of the bone. When the head of the humerus is *dislocated*, the roundness of the shoulder is lost, and the acromion stands out prominently beneath the skin, with a depression below it; while the head can be felt in some unnatural position, and out of its proper relation to the coracoid process. The direction of the whole limb is altered, too; so that the patient cannot place his hand on the opposite shoulder with the elbow touching the chest-wall, as he can in health. In a *fracture* of the neck of the humerus, the roundness of the shoulder is not lost; but there is a depression below the head, which does not move when the arm is rotated, unless, indeed, the fracture be impacted. The two accidents may be combined; but this is a rare complication.

When I turn the model with his back to you, and make him raise his arm, you will appreciate how important the movements of the scapula are. The deltoid alone can only raise the arm to a right angle with the trunk; and the subsequent elevation of the limb depends upon a rotation of the scapula on the ribs, so that the angle comes forward to the margin of the axilla. The scapula is held in its place by the muscles passing from the spine to its base, and by the serratus magnus. If these be paralyzed, the scapula falls forward, and the power of the arm is greatly lost.

Let us pass on to the elbow. With the forearm bent, you see at once the prominent olecranon process of the ulna. When this is broken off by falls on the elbow, the fragment is drawn up by the triceps, and an interval can be felt between it and the bone, which, however, is rapidly filled up by the effusion immediately following any injury to the elbow-joint. A much more common result of a fall on the elbow, however, is an injury to the bursa which lies between the subcutaneous triangle of the olecranon and the skin. In health this bursa cannot be recognized, except in individuals whose occupation has produced enlargement of it—*e.g.*, miners or sweeps; for though it is technically called the "student's bursa," I must confess to have never seen an enlargement of it due to long poring over medical treatises. When the bursa is inflamed, it causes a swelling over the olecranon, which is evidently quite superficial, and does not mask the general outline of the joint, as would be the case were the effusion in the articulation. You may remember that, last week, a patient with suppuration of this bursa was treated by an early and free incision in Ward 1.

The condyles of the humerus are readily felt in this arm; and you will notice that the internal is the most prominent, and stands out beneath the skin. Immediately behind it is the groove in which the ulnar nerve lies, as you may ascertain for yourselves by "twanging" it; and then comes the olecranon, with only just space for the nerve between the bones. This close relation of these two prominent points of bone is of great service in the diagnosis of dislocation of the forearm; for, so long as they lie close together, the deformity cannot be caused by a dislocation of the ulna. The outer condyle is more rounded; and immediately below it is the head of the radius, which can be felt rotating when the forearm is pronated or supinated. It is not often dislocated, for it is firmly held by ligaments; but it is sometimes thrown forward, and then prevents complete flexion of the forearm, by coming against the front of the lower end of the humerus.

At the wrist, you may notice, that the end of the radius is lower down than that of the ulna, and that the styloid processes of both bones are to be felt. Dislocation of the carpus from the radius is rare; but separation of the lower epiphysis of the radius is by no means uncommon in young persons, and is sometimes mistaken for dislocation. The triangular fibro-cartilage which binds the radius and ulna together at the wrist, sometimes becomes dis-

placed in children who are dragged forcibly by the hand, and then the little patient cannot supinate the forearm and hand; but if you hold the hand firmly, and then supinate, you hear a slight click, and all is well. It is well always to bear in mind that, in supination, the bones of the forearm are parallel, and in pronation are across one another; so that supination is the posture in which fractured bones of the forearm should be set, although it is convenient, when the bones are firmly held by splints, to turn the thumb upwards—*i.e.*, to place the hand midway between the pronation and supination.

In the hand, I need only point out that the superficial palmar arch does not correspond precisely to any one of the lines in the skin of the palm; but its convexity reaches generally to the middle one of the three, while the deep arch is much nearer the wrist. The bifurcation of the digital arteries is between the heads of the metacarpal bones, and about midway between the line to which I have referred and the web of the fingers; so that incisions should always be made in the line of the fingers, and not between them. As you may have, early in your career, to amputate a crushed finger, I would remind you, also, that the prominence of each knuckle is formed by the proximal bone of the articulation, and that the joint through which the knife must pass is below this in every case.

Descending to the groin, you see that the fold of the groin corresponds to Poupart's ligament; and an inguinal hernia is above, while a femoral hernia is below—at least at first. Of course, a large inguinal hernia will descend into the scrotum, and a large femoral hernia may turn up over Poupart's ligament, and closely simulate the inguinal variety. But you ought to have little difficulty in distinguishing them if you will invaginate a piece of scrotum (or labium in the female) on the forefinger, as you see me doing, so as to carry the finger into the external abdominal ring. This will enable you to settle at once whether the protrusion has taken place through the inguinal canal or not. Let me also remind you to ascertain the presence of two testicles in the scrotum; for an undescended testes may closely resemble a hernia, especially if inflamed.

The pelvis is so firmly bound together, that a dislocation of one of the innominate bones can only be produced by extreme violence; but disease of the sacro-iliac joint is by no means uncommon, though often overlooked; and one leading symptom is lameness, which is erroneously referred to the hip-joint. But if I make the man before us stand on one leg, you will see at once how the whole weight of the body falls upon the corresponding sacro-iliac joint while he is throwing the other leg forward; and it is this which gives rise to the pain, and prevents the walking of a sufferer from sacro-iliac disease. Taking this man, who has a healthy pelvis, I may compress his two innominate bones without giving any pain; but a woman who has recently had a severe labour, and has, perhaps, incipient sacro-iliac mischief, will cry out at any such rough treatment, though the steady support of a good pelvic-belt would give her great comfort, and restore her powers of locomotion.

The hip-joint in health is freely movable in all directions, as you see, and independently of the pelvis; but, the moment the joint is inflamed, the muscles instinctively contract, and fix the joint to some extent; and then, when the limb is moved, it carries the pelvis with it. This man's back is naturally more curved than a child's; but even in him, if I make him lie flat on the table, you will see that the thigh can be fully extended without tilting up the pelvis, and so increasing the curve of the lumbar spine. In a child, whose back is naturally flat on the table, the effect of early hip-disease is readily seen (as I have frequently demonstrated to many of you); for the attempt to bring the thigh down at once elevates the pelvis and causes that curvature of the lumbar spine which, in old hip-disease, becomes permanent.

The prominence of the great trochanter will vary in different individuals, according to the muscularity of the buttock and the length of the neck of the femur; and it is important, therefore, to compare the two sides in every case of suspected disease or injury. The head of the femur can be indistinctly felt on deep pressure, either in front of or behind the trochanter; and, in health, the two move together;

for if the trochanter can be freely moved by rotating the femur without affecting the head of the bone, it is clear that the neck must be broken. The length of the neck will very much affect the power of rotating the limb; thus if the neck be shortened, either by an impacted fracture or the absorption of old age, the arc in which the upper part of the thigh moves will be found to be much smaller than in health. When I stretch a tape from the anterior superior spine of the ileum to the tuberosity of the ischium, you see that, in health, it touches the top of the greater trochanter; now, if the bone were dislocated or the neck broken, the trochanter would be above or below this line.

When the knee is extended, you see the patella forming a prominence in front of the femur; but, when the joint is flexed, it sinks into the hollow between the condyles. With the leg fully extended and the muscles relaxed, there is, as you can prove in your own limbs, considerable lateral movement of the patella possible in the healthy joint; and the mistake is sometimes made of attributing this mobility to the presence of synovial effusion. When fluid is poured into the knee-joint, however, not only does the patella float so as to be freely movable in any position of the limb, but the synovial pouches on each side of and above the patella are distended, and give the characteristic roundess to the knee. If one kneel down on a flat surface, and particularly if the body be bent forward, as in scrubbing a floor, the patella and the bursa between it and the skin are exposed to considerable pressure; and hence the chronic enlargement of that bursa, termed "housemaids' knee," which causes a globular swelling in front of the joint, altogether different from that of effusion. Kneelers on hassocks or foot-boards do not run any risk of the housemaids' fate, for the pressure in their case comes on the tubercle of the tibia, and the bursa between it and *ligamentum patellæ* would suffer if the pressure were sufficiently prolonged—but I never met with such a case. In falling with the knee bent the patella reaches the ground first, and receives the force of the impact, which may simply bruise or cut open the bursa; or, if very severe, may "star" the patella itself. The transverse fracture of the bone is produced through the effort of the patient to save himself, by which the great extensor muscles catch the bone across the condyles, and either break it or rupture the ligament; then the upper fragment is drawn up in front of the femur, and a space is left in which the condyles can be felt, as in a patient recently in the wards.

With the knee flexed, the rounded outlines of the condyles can be readily felt resting on the top of the tibia; and a little distance below the outer condyle can be seen the head of the fibula—which bone, let me remind you, does not enter into the formation of the knee-joint. The existence of the semilunar fibro-cartilages between the femur and tibia is hardly appreciable in health; but their existence must not be forgotten, as occasionally, in violent wrenches of the knee, one of them becomes displaced, giving rise to extreme pain and inability to use the joint, which are most satisfactorily treated (as also are dislocations of the patella) by a little of that judicious violence for which "bone-setters" have a reputation.

At the ankle, we see at once the prominence of the two malleoli, between which the astragalus fits closely when the foot is at right angles to the leg, less so when the foot is pointed; so that, in this position, some amount of lateral movement of the foot is possible. The fibula is altogether posterior to the tibia, and its maleolus is longer than the internal. The lower third of the fibula is subcutaneous, and its fracture (Pott's fracture) is therefore readily recognised. The tendons of the various muscles surround the ankle-joint, but the only one to which I need call your attention is the *tendo Achillis* at the back, in which, when ruptured, the division is readily both felt and seen. When I flex the knee and point the toes, you can see how completely the muscles of the calf are relaxed; and this is an important point in the treatment of a divided tendon, or of a dislocation of the foot, or oblique fracture of the tibia.

The prominences of the foot are chiefly important as guides to the amputations; thus the tuberosity of the scaphoid on the inner side marks the transverse tarsal joint, or site of Chopart's amputation; whilst the base of the first metatarsal on the inner or prominent

fifth metatarsal bone on the outer side, marks the position of Hey's amputation. The metatarso-phalangeal joint of the great toe is not unfrequently diseased through gout or the pressure of boots which have developed a bunion; and other toes are not unfrequently deformed from the same cause. The only surgical point with regard to the toes that I need mention is that the base of the first phalanx is more expanded and more deeply placed than young operators are apt to imagine.

I have thus run briefly through the more salient points on the living body, which it is important for you to recognize thoroughly in health, before attempting to treat disease; and, in future lectures, I shall have to direct your attention to matters regarding which the knowledge required to-day will be of service in enabling you to recognize deviations from the standard of health.—*British Medical Journal.*

NOTES ON THE LOCAL TREATMENT OF CERTAIN DISEASES OF THE SKIN.

BY L. DUNCAN BULKLEY, A,M., M.D.,

Physician to the Skin Department, Demilt Dispensary, New York, etc.

It has so frequently occurred to me to meet with cases of skin disease where the local treatment which had been previously employed by the physician in charge was decidedly injurious, not simply inefficient, but positively harmful, giving pain to the patient and causing the eruption to persist or increase, that I cannot but feel that a few words upon the subject of local applications to the skin may be of value to the general practitioner.

The greatest number of errors are committed, I think, in the way of over stimulating with irritating applications. There seems to be a very prevalent idea that there is a something requiring to be overcome, a disease which must be met by something more powerful, and the expressions "subdue the inflammation," "overcome the morbid action," "kill the itching," and the like attest the truth of this. Now the real state of the skin in most cases of acute disease is one of irritation; blood vessels, nerves and cells are in a condition of excitement, and require, not stimulant applications, but those calculated to soothe and quiet, and yet it is not at all uncommon to see the harshest applications being made to acutely inflamed surfaces, as eczema. Thus, I have repeatedly had cases of exuding eczema of the genitals, where the itching was terrific and where more and more severe applications had been made, most commonly of the stronger mercurial ointments, or washes of the mineral salts, or strong tarry preparations, each of which would drive the sufferer almost frantic with pain, which, however, was borne because the remedy "*killed the itching.*" But these measures were at the same time aggravating the disease. The basis of this harsh treatment is undoubtedly the clinical observation that the eruption itches more when there is no exudation, whereas when a free secretion from the surface occurs, the itching is for a time relieved.

And this clinical fact has been taken advantage of by Hebra, who is perhaps the most strenuous advocate for the severe local treatment of diseases of the skin, and he has introduced largely into his practice the use of a potash soft soap, and also other stimulating agents which remove the outer layers of epidermis, and *in his hands* these have yieldod good results. But experience has shown me that we cannot employ precicely the same measures in the same way here as are used in Vienna, or rather that we cannot always get the same success with them, partly because a description of their use in words, or even a moderate acquaintance with their application from actual witnessing of Hebra's treatment, does not suffice to permit of their intelligent and successful application here, and partly because the treatment applicable to patients with diseases of the skin in Germany is not suited to those in this country. First, the conditions are different, the patients from whom German experience is drawn are largely in hospitals, public or private, or are made to remain quiescent while under treatment, whereas in this country few go to hospitals for these troubles, and it is extremely difficult to keep our patients at home unless very sick; and, Second, the people in this country differ much in constitution from those of Germany; the nervous, excitable temperament belonging

to our people, whether native or naturalized, impresses itself upon skin diseases as upon those of any other organ.

Thus much in explanation of the necessity for caution in regard to the methods and means used in the local treatment of diseases of the skin.

Before entering upon any special consideration of individual remedies or diseases I must first remind the reader, what is already well known, but too often quite forgotten, that there is nothing peculiarly and intrinsically difficult in the knowledge and treatment of this class of affections, although one would judge that there was from the expressions and therapeutics of many. The pathological changes occurring in the skin are the same as take place in other organs, most of them coming under the head of inflammations, and the means of meeting them are much the same as are employed in treating other affections. No one would think of making harsh applications to the erythematous skin of scarlatina or measles, but localized erythema and urticaria are often submitted to very severe measures, and the remedies used on acutely inflamed eczema defy all scientific explanation as based on pathology; only the most soothing medicaments would be put on the inflamed skin of variola or pustular syphilis, and yet pustular acne and impetigo or impetiginous eczema are continually stimulated and inflamed.

It is true that parasitic affections require remedies to destroy the life of the parasite, and chronic diseases of the skin demand more or less severe treatment, but my experience has been that discrimination as to the proper use of severe remedies is not generally made, and that more harm than good is commonly done by the severe applications, and that better results could often be obtained if milder measures were first employed, increasing the strength of the applications as the case seems to demand. To illustrate this latter—a lady was recently brought to me by one of the older practitioners in this city, with a patch of moist eczema on the middle of the left lower leg, near the outer side. The spot was an inch and a half in diameter, and had commenced from a small point, to which she had applied camphor, turpentine, ect., and for the last two months had been having applied an ointment made with 20 drops of the oil of tobacco to the ounce, to which white precipitate had been added at one time. The effect of these measures had been to make the diseased patch increase steadily in size and to irritate it greatly. She was ordered to keep oxide of zinc ointment (℥i ad ℥i) made with the cold cream, (unguentum aquæ rosæ), continuously applied on waxed paper, renewing it night and morning, without washing; only *wiping off* the old ointment very gently. At the end of three or four days the inflammation had entirely subsided, and she was ordered the compound tincture of green soap of Hebra (R. Saponis Viridis, Picis liquidæ, Alcohol, āā ℥i), with the same ointment, applied in the same way. The point I wish to make is that a sedative and soothing application is often called for to allow inflamed parts to rest, and after a brief stimulation, as with a slight rubbing with such a lotion as the one ordered, the parts must be again protected continuously by some bland covering; often mutton tallow, with equal or more parts of cod liver oil, forms the most grateful covering.

I would here again call attention to the great value of the waxed paper as a local dressing in certain skin affections, as noted by Dr. Duckworth in an article in the *Archives of Dermatology* for January, 1875. Most druggists keep it for covering the tops of ointment jars, and it forms a cheap and useful dressing. Care should be taken to have but very little ointment smeared upon it (it is, as a rule, better in inflamed eruptions to have the ointment applied to a covering and not to the sore), and if the paper and ointment are nicely adapted to the part they will very effectually exclude the air and form a very comfortable and effective dressing.

In the above I have advocated the employment of milder measures than are commonly used to the skin. I would make exception, however, of one application, which is very commonly supposed to be very mild, and which often affords much temporary comfort, but which should be used very sparingly in the practice of Dermatology—I allude to poultices. I am almost daily observing the bad effects which have occurred from poulticing diseases of the skin, and can hardly speak too strongly on the sub-

ject. There are but two conditions in which I ever ordered poultices in my practice; first, where there is phlegmonous inflammation and pus must be formed and evacuated, a poultice both hastens the process and assists in softening the integument and facilitating its exit; this is rarely the case in pure dermatological practice; and second, where there is a hard incrustation which oily applications have failed to remove, a poultice is *sometimes* of service. I must make one more exception, which, however, is of a state akin to that first mentioned, and that is, after the use of a deep escharotic, as Marsden's mucilage in epithelioma, a poultice applied continuously, with frequent changing, hastens the separation of the slough and the subsequent granulation and cicatrization. But, as I have stated, these are the exceptions, and poultices should be very sparingly used in treating diseases of the skin. The practice, so common, of ordering poultices in the eczema of the head of infants, and in the eczema affecting the lower limbs in middle aged and elderly persons, is quite at variance with the teachings of science and the successful treatment of the disease. The parts are already debilitated and relaxed, and what is called for is not the further maceration of tissue by warmth and moisture, but the tonic effect of astringent and slightly stimulating remedies, within proper bounds, of course; these will be indicated later.

One more local measure of general character demands mention here, and that is, the use of proper medical baths, as, alkaline, starch, sulphur, etc. It is to be borne in mind that simple water is irritating to the diseased skin, but when medicated, baths may become a very valuable adjunct to the practice of Dermatology, as European experience abundantly testifies, and as I have occasion to verrify almost daily.

On another occasion, when speaking of special diseases, I will give some of the indications and contra-indications for their use. I allude to the general subject now because of its great importance and its common neglect. I should not omit to mention the daily cold spouge bath, of which I make much use.— *Archives of Dermatology*

REMOVAL OF FOREIGN BODIES FROM THE EAR.

Mr. W. Rivington says, in the *British Medical Journal*:—

From the time of my first connection with the Aural Department at the London Hospital, I have used no other means of extraction of foreign bodies than the syringe, aided occasionally by chloroform, the dependent position of the organ, and the use of a small pair of curved forceps as soon as the substances appeared near the external end of the meatus; and I have never failed in procuring their ejection. Various kinds of foreign bodies, including peas, beans, pebbles, glass-beads, and pins, etc., have been removed in this way, and on several occasions after previous efforts by the same method or other methods had been unrewarded by success. It is the custom, I know, to make use of special forms of extractors, and instrument-makers vend a rude implement with a bent steel eye, which finds its way into cases of instruments, fitted up for the receiving rooms at hospitals. From the incautious use of such a weapon, I have seen irreparable damage done to the membrana tympani, combined with displacement of the malleus and incus, and I cannot but think that it should be banished from the surgical armamentarium.

To sum up, the procedure in cases of foreign body in the ear should be as follows:—

1. Examine the ear carefully by direct light and with a speculum and mirror, to determine the presence, position, size, nature, and peculiarities of the substance.

2. If the patient be a child, and refractory or timid, place him on the couch, give ether or chloroform, and use the syringe, turning the affected ear downward. This manœuvre may be aided, as Mr. Field suggests, by drawing the auricle upward and backward, and applying the nozzle of the syringe to the upper wall of the passage.

3. If the foreign substance do not fall out, as it usually does, after a little patience, but stops near the orifice of the meatus, a fine pair of forceps may be used to withdraw it.

4. A needle or a pin, or other elongated body which does not fill the passage, may be readily taken out with forceps through the speculum, or by the aid of a direct light.

Midwifery.

THE CHANGES IN MIDWIFERY PRACTICE AND IN THE TREATMENT OF UTERINE DISEASES DURING THE LAST TWENTY YEARS IN THE ROTUNDA HOSPITAL, DUBLIN.

BY LOMBE ATTHILL, M.D.,

Master of the Hospital; Vice President of the King and Queen's College of Physicians in Ireland.

(*Concluded.*)

The third rule is the only one on which a difference of opinion now exists among practitioners. No one of any experience as an obstetric practitioner now denies that cases will from time to time present themselves in which the forceps may, with perfect safety, be applied before the os uteri is fully dilated; and further, that from the presence of urgent symptoms, such as the occurrence of convulsions, hæmorrhage, &c., delivery by means of the forceps should, without doubt, be effected before the os uteri is fully dilated. But here agreement ceased. Some—and principal among these, the late Master of this hospital, Dr. George Johnston—hold that the forceps may be applied with nearly as much impunity before the os is fully dilated as at any subsequent period of labour. But from this view I must dissent. I hold that the application of the forceps before the os uteri is dilated is a proceeding not free from danger, and that it should not be undertaken unless grave symptoms likely to compromise the safety of mother or child exist; but on the other hand, when such do occur, I without hesitation have recourse to its use before the os is dilated.

Gentlemen, let me add a warning before I leave this subject. There is a great tendency in human nature to run from one extreme to the other, and this holds good in the present instance; thus, when I was a pupil the forceps was looked on with dread, only used as a last recourse; now it is considered by some as an absolutely harmless instrument, and is had recourse to on every occasion. Against such a principle and such a practice I enter a strong protest. I have known serious injury inflicted by the forceps when injudiciously and unskilfully used, and I am satisfied that injury will often follow if the tendency which at present exists to apply it when unnecessary be not checked.

In one other respect the practice of the present day has also changed. Twenty-five years ago what are known as "the short straight forceps" alone were used. This instrument, which in many cases is very efficient, measures about $11\frac{1}{2}$ inches in length. To the long forceps "the most decided objection" was made; but in this hospital Barnes' double-curved forceps, an instrument 15 inches in length, is now, and in my opinion most justly, preferred. Without doubt a living child can be safely extracted with this instrument where delivery could not have been possibly effected by the old one. I believe that the lives of not a few children, who would otherwise have perished before birth, are now by this means annually saved.

Next in importance to the improvement in practice with reference to the use of the forceps may, I think, be ranked that which has occurred in the treatment of uterine hæmorrhage, whether *post-partum* or depending on the attachment of the placenta to the lower zone of the uterus.

The aim of all treatment adopted with the view of checking *post-partum* hæmorrhage is, and ever has been, to bring about such an amount of contraction of the muscular fibres of the uterus as will be sufficient to close the orifices of the uterine sinuses, and at the same time to shut off the increased flow of blood, which, necessary for the requirement of the fœtus during the continuance of utero-gestation, once parturition has occurred, is no longer needed. With the intention of bringing about this much desired object, the application of cold externally, and the internal exhibition of ergot, were relied on almost exclusively. These agents are not discarded, nor is their value questioned; but cases do from time to time occur in which they fail, and valuable lives are consequently lost. In such cases we now employ, with the greatest success, the perchloride of iron, or some similar stringent, injecting five or six ounces of a solution containing about one part of the liquor ferri perchloridi fort to three of water into the uterus. This treatment I have employed repeatedly and can unhesitatingly bear testimony to its value. I believe that through its means

lives are annually preserved which would otherwise be lost. Our knowledge too of the causes producing hæmorrhage when the placenta is attached close to, or over, the os internum, is now much greater than it was in former days, and consequently the treatment of these cases is modified and improved. The theory generally held was that when the placenta was attached to the lower zone of the uterus it underwent a continuous separation, corresponding to the gradual expansion of the neck, and it was laid down as an undisputed axiom that "the more the labour advanced, the greater was the hæmorrhage;" consequently it was held "that manual extraction of the fœtus by the feet was absolutely necessary to save the mother's life."

To Dr. Robert Barnes we are mainly indebted for disproving this theory, and basing our practice on a sounder footing. It would be impossible for me, in a cursory retrospect, to enter into the discussion of this important subject. At a future time I hope to invite your attention to it more in detail. On the present occasion I can only say that it is to my mind clearly established that the blood flows, in cases of unavoidable hæmorrhage, not from the placenta, but directly from the uterine sinuses; that the old practice of endeavouring to effect delivery by turning is, in many of these cases, a dangerous one; for serious injury is likely to be inflicted, and possible rupture of the uterus occur, from an attempt to force the hand through the undilated, and often undilatable, cervix. Now in the great majority of cases we rely on rupturing the membranes, effecting this by guiding a probe, stilette, or some similar instrument, through the os uteri, and then waiting until uterine action sets in. It is very seldom that much blood is lost after the membranes have been punctured: if it occurs we endeavour to dilate the cervix gradually by means of Dr. Barnes' bags, as his hydrostatic dilators are commonly termed. But it is not very often we are obliged to have recourse to these, and in these cases the less Nature is interfered with the better.

Again in the treatment of puerperal convulsions our practice is greately changed. Bleeding was formerly relied on almost exclusively. It was practised in these cases long after it ceased to be employed in others. I am far from saying that in certain cases of convulsions bleeding is not useful, but it is not often necessary. The exhibition of chloral, or the inhalation of chloroform, is now with justice relied on.

Chloral, too, is now used with great advantage in cases in which the cervix uteri is unyielding, and where delay in the first stage occurs from this cause. In these cases it was formerly the practice to administer tartar emetic in nauseating doses. This, though often very efficacious, is objectionable in several respects; it is most irksome to the patient, who for many hours is kept in a state of nausea; then it is liable to reduce the patient's strength, and sometimes gives rise to troublesome diarrhœa; while with respect to patients who are weakly, or in delicate health, its use is altogether forbidden. Chloral, on the other hand, administered in ten grain doses, at intervals of fifteen minutes, not only gives rise to no discomfort, but sometimes produces refreshing sleep, and seldom fails to induce relaxation of the rigid cervix. The quantity administered in these divided doses should not exceed sixty grains, ten grains being given every fifteen minutes, and a much less quantity is often sufficient.

It is impossible for me, within the limits of an introductory lecture, to do more than name some of the other important improvements which have taken place in the treatment of difficult and complicated cases of labour. Thus I can but allude to the introduction of the cephalotribe, and of the operation of decapitation, which enable us to contend successfully with cases presenting features of the greatest difficulty; while transfusion, as recently practised, has undoubtedly saved lives which would otherwise have been lost.

The advance which has been made in our knowledge of the pathology, and consequently the improvement which has taken place during the last twenty-five years in the treatment of THOSE AFFECTIONS WHICH ARE PECULIAR TO WOMEN, has been, if possible, more marked than that which has occurred in obstetrics. Indeed, I hardly know how to institute a comparison. At the time to which I refer the cervix uteri was considered as being that portion of the uterus which was almost exclusively the sub-

ject of disease, and the os uteri being exposed through the speculum, the patient was generally pronounced to be free from any uterine ailment if the lips of the os uteri proved to be free from abrasion, or to be the subject of ulceration if the exposed surface of the cervix was abraded. Now we are well aware that the body of the uterus, and especially its intra-uterine surface, is far more frequently the seat of disease than the cervix. Formerly the cavity of the uterus was deemed inaccessible to treatment, and the idea of venturing to introduce any medicinal agent into it would have been looked on with horror. Now we, without hesitation, introduce solid nitrate of silver or sulphate of zinc up to the very fundus, while we also apply—not only with impunity, but with absolute advantage—such strong caustics as the fuming nitric acid to all parts of the uterine cavity.

But probably the greatest improvements of all are those which relate to the exploration of the interior of the uterus, and the removal of intra-uterine polypi. Formerly, if from any reason a suspicion existed as to the possible presence of an intra-uterine tumour, we were without the means of verifying our diagnosis, and the patient was in the majority of cases left to linger on till, worn out by repeated hæmorrhages, she sank into a premature grave. But now by the use of sponge tents, or of compressed sea-tangle, we can dilate the uterus, thoroughly investigate every portion of the interior of that viscus, and, if needs be, remove any abnormal growth which may be found within its cavity.

But tumours are also developed in the structure of the uterus, and such are often incapable of being removed by surgical means. These frequently give rise to profuse hæmorrhage which it is necessary to control, and this we now know can be effected by the injection of astringent solutions into the cavity of the uterus, or, in some cases, by the hypodermic injection of ergotin; the latter treatment, too, sometimes producing a marked diminution in the size of the tumor. Then, again, in the treatment of ovarian disease, the splendid success which often follows on the operation of ovariotomy would alone suffice to stamp our age as one of great progress in the treatment of those affections which are peculiar to women.

Time does not permit me to follow this subject further. It would be impossible for me to recapitulate, even in the most superficial manner, all that has been done within the last twenty years to advance our knowledge of the pathology, and to improve the treatment of uterine diseases, using that word in its most extended sense. My object has not been so much to give you an insight into this subject as to show you how extended it is; and yet I have named but a few out of a host of affections, all of equal importance. Reflect, I beg of you, on how much you have to learn while students of this hospital, and remember how short your time is. Remember, too, that your future rests with yourselves. All things are possible to the diligent. Work now while you are students, but, believe me, your work will not be done even when you have passed your final examination.

That I stand here to day is, I believe, due to the fact that early in my professional career I became aware of my own deficiencies, and that I set to work earnestly to improve myself in the knowledge of my profession; and now I find that I am but a learner still. I am aware that while endeavouring to teach you I shall learn much myself. I look on myself as your fellow-student, and I trust we will work together to our mutual advantage, and that we will be able to look back with pleasure on the session which commences to-day as one of great progress and improvement in our knowledge of our common profession.—*Dublin Medical Press and Circular.*

Treatment of Pruritus.—Recently I had a most obstinate and severe case of pruritus of the vulva, clitoris, and mons veneris of a fat woman more than sixty years old. So severe was it, that she would cry from the distress. It so overcame her, every way, that she was nearly helpless. After trying a great number of remedies, both internally and externally, for several months, with very little relief, at length, with only the external application of the essence of peppermint to the itching parts, she was almost instantly relieved, with an occasional use of the same. She remains happy.—*Med. and Surg. Reporter.*

THE MANIPULATION OF ADHERED PLACENTA.

BY JOSEPH HOLT, M.D.

The following directions are given by Dr. J. G. Swayne, in the *British Medical Journal*:—

If the cord be tightly encircled by the os uteri, the constriction should be overcome by insinuating the tips of the fingers into the os in a conical form; whilst the right hand all this time is making counter-pressure upon the fundus uteri, so as to steady that organ. Should these precautions be neglected, the connections between the vagina and the uterus may be put very injuriously on the stretch, especially if the circular fibres of the os oppose much resistance to the introduction of the hand. As the tips of the fingers pass through the os, they should be gradually expanded and separated from one another, until, by sheer fatigue, they overcome the contraction of the uterine fibres, so as to allow the passage of the entire hand into the uterus. When this is accomplished, the next step is to pass up the hand sufficiently high to reach the placenta. The distance which it has to pass before this can be felt will depend very much upon the position of the placenta and the degree of contraction of the uterus. If the placenta be attached, as it usually is, to the fundus uteri, or if the uterus be in a flaccid condition, it will be necessary to pass the hand much further than when the placenta is attached lower down, or when the uterus is well contracted. I have sometimes had to pass the hand quite into the epigastric region, in search of a retained placenta. As soon as the placenta is arrived at, the fingers should be spread out, taking care not to entangle them in the membranes, until the circumference of the placenta can be felt. If any portion of the circumference be already detached, the tips of the fingers should be cautiously inserted between this portion and the inner surface of the uterus, and the placenta gradually peeled off. All this time the right hand, externally applied, steadies the portion of the uterus from which the left hand is detaching the placenta, and enables the accoucheur to estimate the exact thickness of the uterine walls included between the hands, so that he can avoid digging his nails into the substance of the uterus. There is sometimes considerable danger of an accident when the adhesions are very firm and close. There is also considerable danger of leaving portions of placenta behind; a risk that one can readily comprehend in such cases as those described by Dr. Ramsbotham, who states: "I have opened more than one body where a part was left adherent to the uterus, and where, on making a longitudinal section of the organs, and examining the cut edges, I could not determine the boundary line between the uterus and the placenta, so intimate a union had taken place between them." In all such difficult cases, it will be necessary to sever the adhesion by using the finger nails with a kind of sawing motion from side to side. The tips of the fingers are placed in a line like the edge of a saw, keeping the palm toward the placenta and the knuckles toward the uterus, and the sawing motion is continued very slowly and gradually, until the entire placenta is separated and falls into the hollow of the hand. This proceeding sometimes requires a great deal of patience, and is exceedingly tiring; but the accoucheur should take his time about it, working with both hands, and making his ground sure as he goes on, and not withdrawing his hand with the placenta until he is certain that he has brought away every part of it that can be safety separated. It is very seldom, comparatively, that the adhesions are so firm that this cannot be done. Should this, however, be the case, we should have a choice of evils: either to run the risk of causing secondary hæmorrhage and septicæmia by leaving portions behind, or of causing metritis from injury to the uterus in bringing them away. For my own part, I think that the last of these two is the least dangerous, except in very unusual cases. I have notes of only two instances in which it was necessary to leave any portion of consequence behind. Fortunately, in both, the pieces were expelled on the third day, without having caused any untoward symptoms, although in one the piece expelled was as large as a hen's egg. Of course, in all such instances the dangers of septicæmia should be guarded against, as much as possible, by the frequent use of vaginal injections containing Condy's or other disinfectant fluids.—*Medical and Surgical Reporter.*

THE FORCEPS APPLICATION.

When forceps are properly adjusted to the fœtal head, and locked, *can* they slip? that is, *off the head of the fœtus?* We once in a while hear of forceps slipping, but I have always had a doubt whether they have been correctly applied. In the course of a long practice, I have frequently used forceps, and with the knowledge and experience thus acquired, am only sorry I didn't use them more frequently; I might have averted hours of anguish, and quite possibly saved infantile life. But my forceps never "slipped," nor can I quite understand how they could; of course they couldn't slip within the bony pelvis. I have, on more thanone occasion, applied force enough to make them slip, if it were possible for this to happen.

Some years ago I saw a lady, in consultation, who had been in labour for more than forty-eight hours, with an arm extended more than half the time. The doctor, in reporting the case to me, placed his own arm upward, alongside of his head, and remarked, "doctor, it is coming this way." I, however, doubted his illustrated diagnosis, and proceeded to investigate the case, when I found a shoulder presentation. Under the influence of an anæsthetic I turned and delivered by the feet. During the night previous to my seeing the patient, the doctor had made several unsuccessful attempts to use his forceps, but they "slipped" every time. It might be well, too, to have a thought of the injury that might be inflicted on the accouchee by this imperfect application and slipping of forceps.—(L. G. Harley, M.D., in the *Medical and Surgical Reporter.*

Extensive Laceration of the Perineum; Cure.—Dr. Jas. Young, Vice-President of the Obstetrical Society of Edinburgh, relates the following interesting cases of this accident:—"On the 28th June, 1875, I was summoned to see Mrs. M., æt. 35, a primipara. At 6 p.m. the os uteri was small (size of a shilling), although the patient had been in labour for twelve hours. I was again called at 6 p.m. next day, when I found the first stage almost over, and the head presenting in the occipito-anterior position. The woman had been twenty-four hours in labour, and as I considered it unjustifiable to leave her longer I sent for the forceps. The vagina was hot, and the pains were becoming feeble. While under chloroform, I used steady traction during each pain, allowing the external parts time to dilate slowly. Notwithstanding every care, the perineum ruptured right along through the sphincter ani, and into bowel three inches, my whole index finger easily passing from bowel into vagina. When the placenta was expelled, and the uterus contracted, the wound was carefully sponged. The anæsthesia being maintained, the torn parts were brought together with the interrupted suture. Seven ligatures were used, which had been dipped in carbolic oil, and the wound was left in perfect approximation. The urine was drawn off every twelve hours. The thighs were tied together, and by the administration of opium the bowels were confined for six days. No local dressings were used. The patient made a perfect recovery; the wound healed throughout at every point; and on the fourteenth day she was left to her own care. Several weeks ago, I examined the patient by placing one index finger in the bowel, and the other in the vagina, and found the recto-vaginal septum complete. Let me here mention, in connection with her history, that when Mrs. M. was married I understood that perfect sexual intercourse was precluded for some months in consequence of the extreme rigidity of the vagina, and four years elapsed ere this child was born." Dr. Y. says that that in severe perineal rupture the immediate closing of the wound is of paramount importance, so as to secure healing by the first intention. The interrupted suture of carbolized catgut should be used; and the entire rupture must be brought into exact approximation. Careful and frequent sponging must be attended to by the nurse, to avoid any irritation from the lochial discharge. The urine must be drawn off every twelve hours; no dressings applied; the patient kept in the horizontal position; the thighs kept together; and the bowels must not be allowed to move for six days.—*Edinburgh Medical Journal.*

When Should the Umbilical Cord be Ligatured?—By Dr. Budin, ("Bull. Gen. de Therap," Feb. 1876). To this simple enquiry a very prompt reply would probably be given by the majority of practitioners, and that to the effect that it should be done as soon as possible; and yet, as Dr. Budin's excellent memoir shows, the question should be well weighed before so ready and positive a reply is given. Dr. Budin, who is a rising young physician of much promise, read his memoir before the Société de Biologie, of Paris, where it was well received by the members present, including Claude Berrard and other celebrities. Dr. Budin made two series of experiments, each comprising a number of observations. In one he did not cut the cord until pulsation had ceased, and in the other the section was made immediately after birth. In both the blood escaping from the placental end of the cord was collected, and it was found that whilst in the first series it amounted to twelve cubic centimètres, in the second it was no less than one hundred cubic centimètres. Dr. Budin concludes, therefore, that it is best to wait until pulsation has ceased in the cord before it is ligatured and cut, because if the section be made sooner the fœtus is deprived of eighty-eight cubic centimètres of blood. Dr. Budin, moreover, states that the fœto-placental circulation is a completely closed one, and therefore in the normal condition of things no blood escapes from the placental tissues externally.—*British and Foreign Medico-Chirurgical Review.*

Method of Opening Abscesses without causing Pain.—Dr. Borgonzini, of Boulogne, recommends for this purpose the application to the skin, for from three to five miuutes, of a solution of two parts of carbolic acid in one part of glycerine. If the skin is inflamed, as it usually is in acute abscesses, the anæsthesia should not be too long applied. Dr. B. thinks that this anæsthetic may be utilized in autoplastic operations, and for superficial neuralgias. —*La Tribune Médicale*, 26 Dec. 1875.

[Dr. Bill four years ago demonstrated the anæsthetic properties of carbolic acid locally applied, in his elaborate and interesting article published in the July (1872) number of the *Am Journal of Medical Science*, page 35.—Ed.)

Materia Medica.

THE PHYSIOLOGICAL ACTION OF ALCOHOL.

The Nos. of the *Practitioner* for January and February of the present year contain an instructive paper on this subject, by Dr. T. Lauder Brunton. The direct points in this paper are summed up as follows :—

1. Alcohol, in small quantities, increases the secretion of the gastric juice and the movements of the stomach, and thus aids digestion. Although unnecessary in health, it is useful in exhaustion and debility.

2. It increases the force and frequency of the pulse, by acting reflexly through the nerves of the stomach.

3. In large doses it impairs digestion by over-irritating the stomach.

4. It may produce death reflexly by shock.

5. After absorption into the blood it lessens the oxidizing power of the red blood corpuscles. This property renders it useful in reducing temperature. When constantly, or even frequently, present in the blood, it causes accumulation of fat, and fatty degeneration of organs.

6. It undergoes combustion in the body, maintains or increases the body weight, and prolongs life on an insufficient diet. It is therefore entitled to be reckoned as a food.

7. If large doses are taken, part of it is excreted unchanged.

8. It dilates the blood-vessels, increases the force and frequency of the heart by its action on the nervous centres, to which it is conveyed by the blood, imparts a feeling of comfort, and facilitates bodily and mental labour. It does not give additional strength, but merely enables a man to draw upon his reserve energy. It may thus give assistance in a single effort, but not in prolonged exertions.

9. The same is the case with the heart; but in disease alcohol frequently slows instead of quickening the pulsations of this organ, and thus economizes instead of expending its reserve energy.

10. By dilating the vessels of the skin, alcohol warms the surface at the expense of the internal organs. It is thus injurious when taken

during exposure to cold, but beneficial when taken after the exposure is over, as it tends to prevent congestion of internal organs.

11. The symptoms of intoxication are due to paralysis of the nervous centres; the cerebrum and cerebellum being first affected, then the cord, and lastly the medulla oblongata. It is through paralysis of the medulla that alcohol usually causes death.

12. The apparent immunity which drunken men enjoy from the usual effects of serious accidents, is due to paralysis of the nervous mechanism, through which shock would be produced in a sober condition.—*Amercian Journal Med. Science.*

EXPERIMENTS ON ERGOT OF RYE.

Dr. G. Leir, ('Le Sperimentale' Nos. 8, 9, and 10, 1875), concludes from experiments undertaken by him that it is to the phosphoric acid it contains that Ergot of Rye owes its properties. After having shown the effect obtained in three bitches by the employment of medicinal phosphoric acid he related two observations made at the Maternity of Pisa, by Dr. Garzella, on two women aged respectively twenty-five and twenty-eight years. The following are Dr. Leir's conclusions:—

(1) The therapeutic effects derived from Ergot of Rye are due to the phosphoric acid it contains.

(2) In diseases in which the employment of Ergot of Rye is useful, the employment of phosphoric acid renders identical service.

(3) Phosphoric acid acts with equal intensity and rapidity with Ergot of Rye.

(4) The quantity of soluble phosphoric acid found in recently powdered Ergot of Rye is in proportion to the activity of the drug.—*British and Foreign Medico-Chirurgical Review.*

In two cases of diabetes mellitus, Von Hasse has seen great improvement resulting from the administration of ergot. His formula was as follows:

℞ Ext. Secale Connit.
Ext. Hyoscyami. aa. grs. xvi.
Liq. Potassæ Acetat ℥i.
Aq. Fœniculi ℥ii.

A large dessert-spoonful to be taken every three hours.

Medical Jurisprudence.

THE EXAMINATION AND COMMITMENT OF THE INSANE.*

BY A. E. MACDONALD, M, D.,
Medical Superintendent, New York City Asylum for the Insane.

The examination of patients, supposed to be insane, with a view to their commitment to an Asylum, is a duty, to the performance of which any gentleman in general practice is liable to be often summoned, and one for which he should be always prepared by a knowledge of his powers and duties, under the law of the State in which he resides, and by a knowledge of the disease and its manifestations. To deprive any person of his liberty for a greater or shorter period, to bring to his family the grief which their separation causes and to entail upon him and them the reproach which commonly, though improperly, attaches to the fact of such confinement, is certainly a serious matter, and the law very justly subjects to penalty any physician who makes any improper commitment.

The laws of the various States differ materially as to the manner of the commitment of the insane, and as to the part which the physician plays in the process. In some States he is not called upon at all, the parents or guardians, or near relatives of an insane person, being empowered to commit him, without medical evidence as to his insanity. In others, the certificate of but one physician is required; but in those States where legislation upon the subject is farthest advanced, no patient can be deprived of his liberty, save upon the sworn testimony of two reputable physicians, that he is insane, and unfit to be at large. The State of New York has, by recent revision and codification of its statutes, under the supervision of the State Commissioner in Lunacy, Dr. Ordronaux, placed them upon a very satisfactory footing. I shall refer to these statutes and the forms which they prescribe, in treating of the matter, as they sufficiently represent, in a general way, the legislation of other States upon the subject. I may tell you here, though, for

* A Lecture delivered before the students of the University of the City of New York, Medical Department, March 10th, 1876.

the comfort of such of you as, being under-graduates now, propose to practise in this State after your graduation, that you are not likely to have speedy occasion to exercise your knowledge in this special direction, as by the law of the State, a physician must be a graduate of three years' standing in order to take out commitments for the insane.

The statutes, then, of the State of New York regulate the commitment of the insane by the following enactments :

SECTION 1. No person should be committed to, or confined as a patient in any asylum, public or private, or in any institution, home or retreat, for the care and treatment of the insane, except upon the certificate of two physicians, under oath, setting forth the insanity of such person. But no person shall be held in confinement in any such asylum for more than five days, unless within that time such certificate be approved by a judge or justice of a court of record of the county or district in which the alleged lunatic resides, and said judge or justice may institute inquiry and take proofs as to any alleged lunacy before approving or disapproving of such certificate, and said judge or justice may, in his discretion, call a jury in each case to determine the question of lunacy.

§ 2. It shall not be lawful for any physician to certify to the insanity of any person, for the purpose of securing his commitment to an asylum, unless said physican be of reputable character, a graduate of some incorporated medical college, a permanent resident of the State, and shall have been in the actual practice of his profession for at least three years, and such qualifications shall be certified to by a judge of any court of record. No certificate of insanity shall be made, except after a personal examination of the party alleged to be insane, and according to forms prescribed by the State Commissioner in Lunacy, and every such certificate shall bear date of not more than ten days prior to such commitment.

The following is a blank form of medical certificate, as prescribed by the State Commissioner in Lunacy.

STATE OF NEW YORK, } ss.
COUNTY OF , }

I. , a resident of , in the county aforesaid, being a Graduate of , and having practised three years as a Physician, hereby certify, under oath, that on the day of , I personally examined of *

* [Here insert sex, age, married or single, and occupation.]

and that the said is Insane, and a proper person for care and treatment, under the provisions of Chapter 446, of the Laws of 1874.

I further certify that I have formed this opinion upon the following grounds, viz : *

* [Here insert facts upon which such opinion rests.]

And I further declare that my qualifications as a Medical Examiner in Lunacy have been duly attested and certified by *

* [Here insert the name of the Judge granting such certificate.]

Sworn to and subscribed before me, this day of , 187 . }

The chief improvement in this certificate, as compared with those formerly in use, is that it requires the physician signing it to state his reasons for considering the patient insane. It is not enough, as formerly, to give the conclusion ; the grounds for the conclusion are to be furnished also. The object of this is to insure careful personal examination, and to furnish the officers of the institution to which the patient goes with information which will be of value to them in determining his treatment, and hence its importance. I am not aware that this is required under the laws of any other State of the Union. A compensating difference to yourselves may be found in the fact, that in no other State is it required that any prescribed length of time shall have elapsed since his graduation, before a physician is deemed competent to commit lunatics, so that such of you as intend to practise elsewhere, may enjoy the privilege and its resulting emoluments from the outset. I would call your attention to the wording of the commitment used in most States, but not now in New York, with regard to the condition of the patient, which justifies you in secluding him. He must be "insane, and so far disordered in his senses, as to endanger his own person, and the persons and property of others if permitted to go at large," so that a man must not only be insane, but dangerously so, before you can commit him, and, conversely, it is not necessary to send every person who is insane to an asylum, if he is at the same time harmless. This exempts such cases of chronic and harmless insanity as can be properly cared for at their homes, and it also gives you the right to retain the few patients, those with puerperal insanity for instance, who can as well

or better be treated there, and whom it would be unwise to expose to the dangers of removal while their disorder is in the height of its acute stage. On the other hand it may be construed to embrace almost any case, certainly any acute case, for the man who is so insane as to prevent the proper remedies being administered and applied elsewhere than in a building, and among agencies specially prepared for the purpose, may certainly be considered to endanger his own person.

We will suppose, then, that you are called to examine a person alleged to be insane, with a view to his commitment to an asylum. Unless you are yourself the family physician of the patient in question, the summons will likely come, either from the gentleman who fills that office, or from a relative of the patient, and to the form of that summons, I believe, are attributable the mistakes which sometimes *do* attend the commitment of supposed lunatics. Nine times out of ten, you will be asked directly to *commit* the patient, not to *examine* him. Your brother practitioner will say to you "come with me and commit a lunatic," or the family will write to you that your services are desired, that they may send their relative to an asylum. You would not receive a summons to come and prescribe quinine for a patient, or administer any specified form of medical treatment, in a case of some other disease, and yet here the whole thing is decided for you beforehand, and the course you are to pursue laid down for you. Consequently when you go, either you fall insensibly into the spirit in which the summons is sent, and do what you are directed to do, after a very cursory and imperfect examination; or else, if you do make an examination, and conclude not to commit, you feel that you have somehow obtained admission under false pretences, and have not done what people had a right to expect of you, and generally, you are made perfectly sensible of the fact, that they entirely agree with you upon the latter point. I have even known some practitioners in this city, who did not ask or expect a fee, in cases where they failed to satisfy themselves of the propriety of committing, although such cases naturally occupied more of their time, and taxed their knowledge and experience, more than those in which the presence of insanity was patent at a glance. Apart from the glaring impropriety of neglecting to obtain a fee whenever possible, this course has the demerit of sanctioning the form of engagement of which I complain, and recognizing a sort of "no cure, no pay" system. Properly a medical man should be called to a case of insanity, as to a case of any other disease, to examine, and, having examined, to prescribe as he sees fit. Sequestration in an asylum is as purely a therapeutic agent as any in the *materia medica*, and its prescription and exhibition should come from the medical attendant, not from the bystanders. In the way in which you accept such summons, and invite to such consultations, you can do much to alter this state of affairs, and so assert the proper function and dignity of yourself and your profession.

If you happen to be the family physician of the patient, a formal visit will be scarcely needful. You will have observed the gradual approach of the disease, and have seen reason to anticipate the call. More than likely you have been the one to first appreciate the necesssity of the step and to urge its being taken. In this you have very probably been met by the opposition of the relatives and friends of the patient. They have refused to see things as you have seen them. The patient is in their eyes only a little cast down, a little excited, a little eccentric, it will be time enough to take active measures if the trouble increases. They are unwilling to take the responsibility of authorizing the patient's removal without consultation with other, and perhaps distant relatives. They are sure that confinement with other lunatics would make him worse; they fear that he will never forgive them should he recover. Thus in a hundred ways they thwart your purpose and plead for delay. It will be your duty to tell them that each day's postponement, by so much, lessens the probabilities of recovery; that insanity, under timely and efficient treatment, is commonly recovered from; that in nine cases out of ten the patient will not know where he is, appreciate his surroundings, or recognize the fact that his comrades are lunatics—at any rate restraint and discipline applied in an asylum will be less irksome to him than if he is called

to endure them in his own home. You must impress these points upon them firmly and forcibly, and make them fully understand the great responsibility that will rest upon them, if, through their unwillingness to follow your advice, the patient passes, for want of prompt and energetic treatment, into a condition of permanent mental alienation. And yet more than likely, your advice and your warning will be disregarded. Of the thousands of hopeless lunatics who crowd our asylums a large proportion owe the incurability of their disorder to the procrastination of their friends.

If, instead of being the family physician, you are merely called in when the necessity of the patient's confinment can no longer be disputed, this duty and this trial will be saved you. If the call is to unite with the family physician in perfecting the necessary legal formalities, your task will be relatively easy, for from him you can obtain particulars which will simplify it. It is possible, however, that your associate may be as much a stranger to the patient as yourself, and as a case of this kind will present the greatest difficulties and require the greatest tact and caution, I shall suppose such an one in my description.

Your first encounter will be with the patient's relatives—and generally with his female relatives, who will tell you a great deal that bears upon the case, and a great deal more that does not. As a rule you may divide the relatives of an insane person into two classes, those who want to send him to an asylum at all hazards, and those who want to keep him out at all hazards. Those who have no predetermination in either direction, who simply wish to see what *you* think, and do what *you* advise, are very much in the minority. Fortunately, as a general thing, you are likely only to meet those of your way of thinking, in whichever direction their pre-conceived opinions may tend, but this is not always so. Now and again there will be two sides to the question, and then your difficulties will increase. Take, for instance, the case of a young wife who becomes insane ; on the one hand you have the husband, on the other her family. Each side is perfectly convinced that the misfortune which has overtaken the beloved one is distinctly traceable to some neglect or interference of the other, and there is as wide a difference in their views as to what is proper to be done under the circumstances.

It will be necessary for you, as I have said, to listen to a great deal of information, and to a great deal of theory and surmise. Much of what is told you will be useless, and much of it untrue. If you can manage it, it will be better to gain your information from one comparatively disinterested—say an inmate friend or an intelligent servant—than from a near relative of the patient. At any rate you will want to learn certain facts, and you must try to get your informant to simply answer your questions without being discursive. You will ask first, for instance, the patient's age—the sex you will already know—then his or her civil condition, whether single or married or widowed. The occupation which has been followed will sometimes be a guide to you, and it will be well to inquire as to the religious belief, and the habits with regard to church-going and such like. The general habits then are of great importance, —has the patient been temperate or intemperate, disposed to enjoyment or solitude, have there been venereal excesses or addiction to self-abuse? You may pass next to the bodily health—what has been the patient's history? Has there ever been a previous attack of insanity or any nervous disorder? What diseases has he or she had? And, if a female, what has there been of irregularity in menstruation, parturition, or at the climacteric? Another question, and a most important one, what is the family history? Have there been insane members or sufferers from epilepsy, paralysis, or other nervous disease? Have there been marriages of consanguinity? Were the patient's parents healthy? Were they intemperate? So you may pass to his present condition? Ask first how long he has been ailing, and receive the answer with a grain of allowance, for almost invariably the period assigned for the invasion of the disease will be much more recent than the real one. Ask next the supposed cause. Has the patient had business reverses, family troubles or afflictions, or has there been religious or political excitement? What recent illness or injuries have there been, or has there been prolonged dissipation? If the patient is a

young girl, has menstruation commenced, and is it regular; if a young boy, is there reason to suspect masturbation? Ask then what symptoms were first noticed. In what did the patient first commence to depart from his customary habits and demeanor, and in what manner has the departure increased? What is his present state, and how long has been its duration? What delusions has he manifested, and if he is disposed to talk, what subject seems uppermost in his mind? Remember that these questions should be asked before you visit the patient, in order that the answers may assist you in personally examining him. They are to be taken only for what they are worth, as confirmatory of what you may yourself observe, not as sufficient in themselves to determine your diagnosis. Your informant will probably consider them all sufficient, and will perhaps resent your seeking further, or giving the patient more than a hasty and cursory examination. No matter, your affidavit will be that you have examined the patient and found him insane, not that you have been so informed by his friends. If you omit anything before you visit the patient, do not seek to remedy the omission by asking the question in his presence, unless it be something that you are perfectly willing that he should hear. The most absorbed and distraught appearing patients, are often keenly observant of all that passes about them, and though you may fail to get them to reply to your questions, you must not think that it is because they do not understand both them and all else that you say. In insanity, at the commencement, the senses are more often sharpened than dulled, and you will find that there is a good deal of cleverness and cunning. It will be well for you also to see the patient's letters and other writings.

(*To be continued.*)

In his Croonian Lectures, Dr. Dickenson relates a curious case of congestion of the kidneys, brought on by a cold drive over a Yorksire moor, were the swelling induced was so great that the capsules of both kidneys were rent, and a massive coagulum of blood was found in the gaping tear. In this case the pain in the loins was so great that it was supposed there must be a renal calculus.

Translations.

CHRONIC CONSTRICTION OF THE AORTA IN A CHILD TWO YEARS OLD.

BY MOUTARD MARTIN.

Eugene M—, aged two years, comes into the Salle St. Jean with the following antecedents: he has been swollen for several months, and since he has been weaned, has been oppressed [in breathing].

At the time of his entrance, we find in him hypertrophy of the heart with increased impulse; in the middle of the precordial region, a rubbing, revealed both by palpation and auscultation, indicates pericarditis; at the same time a very loud, rough souffle, most intense at the base of the heart, marks this first sound, and indicates an aortic constriction. This souffle is heard very intense throughout the thorax. As for the pulse, it is large, vibrating, and would rather resemble that of aortic insufficiency; œdedema and ascites; no albumen with urine. In spite of blistering, matters do not change, and suddenly the child is seized with very severe convulsions. The application of the Marteau de Mayr recalled him to life; but the next day he had varioloid eruption which became hæmorrhagic, and to which he rapidly succumbed.

At the autopsy the following lesions were found: pericarditis slight, without effusion; heart enormously hypertrophied; nothing at the mitral orifice, but on the aortic side of the mitral valve, which forms the mitro-sigmoidean sinus, two small yellowish spots not elevated,—these were evidence of previous inflammation. The sigmoid valves red, thickened, and swollen; at the point of their union they grasped tightly a death-clot. Two or three centimetres above the origin of the aorta, on its inner surface, were small, irregular, yellowish patches from 2 to 5 mm. in dimension, forming projections scarcely perceptible. —*Progrès Medical.*

Cure of Phymosis by Sponge Tent has recently been practised with success by Dr. Gregorelly, in a case of syphilitic origin.

Some idea of medical fees in Austria and Bavaria may be gathered from the following translation of items which recently appeared in one of our Vienna exchanges :—A petition got up by the physicians of Upper Austria to raise the fees in legal cases states that a surgeon (wundarzt) for the legal examination of an individual, together with the report and attendance on court receives, $8\frac{3}{4}$ kreuzers (about 18 cents). It further enquires where the common labourer is to be found who will work for such wages. In Bavaria an order has been issued by royal command regulating the fees to be received by medical men in private practice. This regulation comes in force when no previous private arrangement has been made. Visits are divided into three classes—for the first $1\frac{1}{2}$ to 5 marks, ($37\frac{1}{2}$ cts. to $1.25) for each following visit, 1 to 3 marks, (25 to 75cts.,) for night visits double. For advice in the doctor's office $\frac{1}{2}$ to 3 marks, ($12\frac{1}{2}$ to 75cts.)—*Medicinisch Chirurgische Rundschau.*

Russian Cure for Drunkenness. — M. Haurowiz says that for some time past the *Herba serpyllia* (wild thyme) has been used with great success to effect a permanent cure of drunkenness ; in case of a relapse (only after years), a short treatment will effect a cure again. The treatment consists in making an infusion of wild thyme ($1\frac{1}{2}$ oz. to $1\frac{1}{2}$ pint), and giving the patient a teacupful every half hour. The next day it is given every two hours, and then four to six times a day until the cure is complete, which generally takes from two to three weeks. The effects are in the following order : vomiting, diarrhœa, increased urine, strong transpiration ; then, generally, increased appetite and craving for acidulous beverages. Diet : easily digested food, and lemonade or other acidulous liquids.—*American Journal of Pharmacy.*

Treatment of Rabies by Xanthium Spinosum.—The Paris *Médical* says that Dr. Grzymala, of Podolia, has been using this plant in doses of gr. ix. of the powder, [it does not say of what part of the plant], three times a day for a period of three weeks. For children under twelve years half that dose is given. Rabies is very common in Podolia, and in cases where Dr. Grzymala gave it before the attack showed itself it seemed to neutralize the virus, both in man and other animals, whereas other cases bitten by the same dogs, and subjected to other modes of treatment, succumbed with all the symptoms of rabies. Xanthium Spinosum acts either as a sudorific, sialogogue, or feeble diuretic ; it rarely acts in all these methods at once.

Searching for Vesical Calculi is one of the latest uses to which the aspirator has been put. We observe from the Paris *Médical* that M. Von Brandt had several times to withdraw the urine of an old man by means of a capillary trocar, and suspecting stone he explored with the canula. He recommends this plan of exploration when the more usual has left the operator in doubt. No part of the *bas-fond* can escape the search of the canula. He considers the one procedure no more injurious than the other.

Turpentine Externally in Poisoning by Phosphorus.—Dr. Hicgret has reported to the Societé de Liége two cases of poisoning by phosphorus, in both of which frictions of turpentine were employed. In one, a man aged 35 took about 13 grs. of phosphorus. The stomach could retain nothing. The frictions were used for eight days. He recovered perfectly. In the other a woman aged 53 took about 19 grs. The frictions were used every two hours, and bags soaked in turpentine were used to saturate the air of the room with it.

Chloral in Pityriasis.—Dr. Martineau asserts that a solution of forty grains of chloral to an ounce of water, applied to the scalp each morning by means of a sponge, using slight friction, and allowing it to dry, is very efficacious in pityriasis. If the disease is recent, and the lotion is uninterruptedly used for a month, he predicts a certain cure. In the chronic and more obstinate cases, he recommends the continuance of the application of the solution until the disease disappears, as its daily use produces no inconvenience, whilst it relieves the itching. —*Med. and Surg. Reporter.*

THE CANADIAN

Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, JUNE, 1876.

COMPULSORY ANNUAL EXAMINATIONS.

That a student in medicine should not be compelled to pass annually an examination on the work prescribed for him during the winter course of lectures, when in law, arts, and divinity such examinations must be completed, is an anomaly that requires very strong reasons for its justification and continuance. When the question was before the Medical Council last year, considerable hesitation, nay, even opposition, was evinced by certain members, with regard to a reform that carries conviction on the face of it. And why was this? Simply because from the present position of our medical schools, sectional feeling caused a division of opinion upon a subject of whose utility, apart from all other considerations, no one who has studied the matter can venture to doubt. And when men are delegated from the schools to watch over the interests of those schools as well as of the profession at large, no one can find fault with them for doing their duty and looking closely after those interests with whose care they have been entrusted. We merely think it very unfortunate that the general good should be in danger of being subordinated to sectional interests. We hope, however, that it was shown at the Council last year, that these two interests need not necessarily clash, and we trust that the approaching meeting will confirm the act of last year. Surely, too, our universities must soon see the necessity and wisdom of annually testing the knowledge of medical students. When we find that for five years past the University of Toronto, the pride of all her graduates, has been behind her sister University of Harvard in this educational reform, we must think that the Senate as formerly constituted was indifferent alike to the best interests of the University, her students and her graduates. Now that we have working men in the Senate Chamber, and especially when the medical graduates are so largely and so ably represented, further delay in the matter certainly cannot take place. At Harvard, a medical student is compelled to pass annually an examination in certain branches before he can pass on to the next year, and before he can obtain a degree. We should be sorry to see the details of the plan adopted by Harvard, substituted for the present curriculum at the University of Toronto; still theirs is a move in the right direction, which has been followed by good results. Granted that a certain number of students require no compulsion to cause them to make the best use of their time; it is well known that many others waste six months or a year in the commencement of their course, and during their second year endeavour to cram up what they consider will suffice to pass them through their primary examination, and in many cases a third session is wasted in a similar manner, to be followed again by the cramming process in their fourth year. That so large a number as sixteen out of thirty-one should be wholly or in part rejected at primary examination, shows clearly that the ambition and determination of many are not sufficient, without some compulsion, to enable them to qualify themselves for useful practitioners. In England, where they are slow to reform, Mr. John Marshall has lately brought the question of annual examination before the Council of the Fellows of the Royal College of Surgeons, and strongly urged its adoption. Mr. Marshall made the suggestion on account of the large number rejected at the primary examinations, and the unsatisfactory knowledge of many candidates who do pass. The scheme was kindly received, and referred to a committee for consideration.

Last year, at the University of Toronto, six candidates competed for the three scholarships in medicine. This year there were thirteen,

and yet this latter number is far too small. If all had to enter for these examinations, the competition would be keener; many good men who at present either through indolence or indifference are content to make a good pass, would, when they knew that their names would be ranked in the yearly class lists, endeavour to place themselves high in honours, and others for very shame would strive not to be last. The University scholarships and medals, high as they are valued now, would hold a still higher place in the estimation of all, and would far better fulfil the objects for which which they were instituted. The status of University graduates would be raised higher still, the University would be still more honoured in her graduates, and the public at large would be still more benefitted. Had we any doubts as to this scheme of annual examinations being adopted by the University and by the Council, we would strongly advocate a regulation requiring all students appearing for their license or degree to produce certificates of having passed annually a creditable examination at the school at which they studied. We hope, too, that botany will either be removed from the curriculum, or placed among the subjects for matriculation. As at present studied, it is a nuisance and a waste of time to the student, and crowds out more important information. Part of chemistry, too, might be well added to the matriculation.

To Our Subcribers.—We hope we need only mention the subject of our subscription to elicit a hearty and substantial response. The expenses of initiating a journal are heavy, and individual subscriptions will be gladly welcomed.

Seven Springs Iron and Alum Mass.—In our advertising columns this medicine is highly praised by several Virginia physicians. The virtues claimed for it are Tonic, Diuretic, and Alterative. Its chemical composition will be found in the adv't.

The Ontario Medical Council will meet on June 6th. We hope the subject of annual examinations, the collection of the annual tax, and the prosecution of unlicensed practitioners will then be definitely settled.

Toronto Eye and Ear Infirmary.—We beg to call attention to the advertisement of the removal of the Eye and Ear Infirmary. This useful institution is now situated at 153 Church Street.

BOOK NOTICES.

Medical and Surgical Memoirs. By Joseph Jones, M.D., New Orleans.

On some Practical Points in the Treatment of those forms of Eye Disease of most frequent occurrence in General Practice. By A. M. Rosebrugh, M.D., Toronto: Dudley & Burns, Toronto.

On the Wire Ligature in the Treatment of Ununited Fractures, and in Resections of Bones for Deformity. By William A. Byrd, M.D., Quincy, Ill. New York: D. Appleton & Co.

Gratuitous Attendance on the Clergy in the United States.—It seems that it is a custom among many practitioners in the States to render their services gratuitously to the clergy, even when they may be quite able to afford payment. An anecdote related by a correspondent of the *New York Medical Record* (March 11) shows that the recipients of such services attach about the same value to them as the donors. Having attended a clergyman's child through a long illness, on being asked for his bill he declared there was "nothing" to pay. Some time after he learned that another practitioner was in attendance on the family, who always made it a rule to be paid for what he did. He expressed his surprise to a friend. The latter replied that he had learned from the clergyman's wife that as Dr. —— did not charge anything for his services, they concluded that they could not be worth much, and determined, on the occurrence of a serious case in the family, to resort to another practitioner.

The *Allegemeine Medicinische Central Zeitung* states that in one district several foxes, which were shot, were found to contain in their muscles a large number of free and encapsuled trichinæ.

Meetings of Medical Societies.

WESTERN AND ST. CLAIR MEDICAL ASSOCIATION.

The sixth regular meeting of the Western and St. Clair Medical Association was held at the Crawford House, Windsor, on Wednesday, the 3rd of May, at 10.30 a.m. Dr. Bray, President, in the Chair. There were present, Drs. Andrews, Casgrain, Lambert, Carney, Coventry, Aikman and Martin, of Windsor; Nesbit, of Sandwich; Allworth, of Leamington; Gaboury, of Belle River; Tye, of Thamesville; Vanvelsor and Samson, of Blenheim; Holmes, Abbott, Murphy, Fleming and Roe, of Chatham; Fraser and Maclean, of Sarnia; Edwards and Stephenson, of Strathroy; and Ross, of Birkhall. And by invitation, Drs. Jenks, Noyes, Brodie, McGraw, Shirley, Eugene Smith, Sinclair, and H. Smith, of Detroit; and Leonard, of New York.

The minutes of last meeting were read and adopted.

A communication from the Centennial Medical Commission of Philadelphia, inviting the appointment and attendance of delegates to the International Medical Congress, was read. A letter from Dr. L. Harvey, regarding the meeting of the American Medical Association, was also read.

Moved by Dr. Carney, seconded by Dr. Casgrain, that Dr. Andrews, of Windsor, be elected an honorary member of the Association. Carried.

Moved by Dr. Abbott, seconded by Dr. Gaboury, that a Committee, consisting of Drs. Holmes, Tye, Casgrain, Fraser, and the mover, be appointed to recommend delegates to the Dominion Medical Association, and International Medical Congress. Carried.

Dr. Fraser, Chairman of the Printing Committee, presented his report.

Moved by Dr. Carney, seconded by Dr. Lambert, that the transactions in future be printed at the end of the year instead of quarterly as at present. Carried.

Dr. Samson then read his paper on a number of cases of great practical interest which had occurred in his practice; and Dr. Bray read a paper upon post-partem hæmorrhage introductory to the discussion upon that subject. Both gentlemen received the thanks of the meeting for their excellent papers.

The meeting then adjourned to enjoy the generous hospitality of the Medical fraternity of Windsor at the Crawford House, and by their kind arrangement the members from a distance were enabled to visit the museum of the Detroit Scientific Society, the House of Correction, Harper's Hospital, the chemical works of Messrs. Parkes and Davis, and other places of interest in the city.

On re-assembling at 4 p.m., the committee appointed to nominate delegates, recommended that Drs. Edwards, Coventry, Holmes, Murphy, Tye, and Maclean be delegates to the International Medical Congress; and Drs. Bray, Carney, Hoare and Fraser, delegates to the Dominion Medical Association.

On motion the report was adopted.

Dr. Andrews returned thanks to the Association for having elected him an honorary member, and announced in a few parting words his retirement from the active practice of the profession in which he had been engaged for over fifty years.

Dr. Brodie of Detroit thanked the Society for the invitation to be present at the meeting, and expressed his good wishes for the Society, and for the profession in Canada; and extended a reciprocal invitation to meet the State of Michigan Medical Society at Ann Arbor on the 10th of May, and the American Medical Association in June.

Dr. Jenks of Detroit, President of the Michigan State Medical Society, said he was authorized by the Michigan, Ohio, and Indiana State Medical Societies to bring before this Association the matter of forming a sort of limited International Medical Society for purely scientific purposes and discussion, to embrace the States above named, and a portion of Western Ontario. After some discussion as to the desirability and best means of bringing this about, it was moved by Dr. Tye and seconded by Dr. Carney,—That the President and Secretary of this Society, together with Drs. Edwards, Casgrain, Coventry and Carney, be a committee to meet with a committee from the Societies

above named; the joint committee to meet at the call of Dr. Jenks. Carried.

A discussion now took place on the paper read by Dr. Bray on post-partem hæmorrhage, in which Drs. Jenks, Holmes, Roe, Noyes, Smith, Edwards and Coventry, in the main agreed with the opinions advanced in the paper, some however taking exceptions to the treatment by injection of perchloride of iron.

Dr. Noyes, of Detroit, kindly consented to read a paper before the Association at its next meeting, and Dr. Fraser promised to introduce a subject for discussion.

The Association then adjourned to meet at Sarnia in August next.

At the half-yearly Meeting of the Medical Association of King's and Queen's, held at Port Perry, on May 16th, resolutions were adopted condemning the contemplated change in the system of prosecuting unlicensed practitioners, and condemning the principle of appointing the Examining Board from among the members of the Council. The officiousness, alleged drunkenness, and arbitrary conduct of some examiners were censured, as also the practice of furnishing the public press with notices and reports of operations. The following names are to be submitted to the Council as fit examiners: Dr. Sangster, Chemistry and Physiology; Dr. Bascom, Medicine; Dr. Hillary, Materia Medica; Dr. Coburn, Midwifery; Dr. McGill, Surgery; Dr. Eastwood, Medical Jurisprudence. The publishing, in the public press, of a candidate's standing at the late examinations was characterized as a gross violation of confidence. Those examiners whose conduct at the late examination was calculated to cause insubordination were censured.

Royal College of Surgeons of England. At the meeting of the Council in April last, Dr. Sleveking was appointed Examiner in Medicine. With regard to the admission of women to the examination for the degree of L.M., it was agreed that Mesdames Jex Blake, Thorne, and Peachey should be informed that the members of the Board of Examiners in Midwifery having resigned their offices, the Council are obliged to postpone the holding of examinations for certificates of qualifications in midwifery. It appears that Dr. Graily Hewitt has withdrawn his name as a candidate for the vacent Examinership in Midwifery, and the Council are not inclined to offer the appointment to the younger class of obstetricians. The Council, finding that the number of Fellows is yearly growing less, or in other words, that the number who take the fellowship by examination is insufficient to maintain the numerical strength of the present body of Fellows, has determined upon altering that examination in such a manner that it shall in future be less difficult for a member of the College engaged in practice to prepare himself for and to pass the examination for the fellowship.

Toronto University Annual Examinations in the Faculty of Medicine.—The following gentlemen passed their final examination for the degree of M.D.: Britton, W.; Cameron, K. H.; Leslie, R. B. Degree of M.B.: Bentley, R. H.*; Bowerman, A.; Jessop, E.; Knowles, W. R.; Lackner, H. S.; Mackie,—; McDonagh, G. R.; McPhedran, A.; Smith, J. W.; Strangways, W. F.; Tyrrell, R. S.; Wilson, W. Primary: Ashby, T. H.; Barkwell, R. H.; *Burton, W. H.; Davidson, A.; *Esmond, J. J.; *Field, B.; *Grant, A.; Kennedy, G.; *Langstaff, G. A.; Langstaff, J. E.; Macklin, M.; McKeough, G. F.; McKinnon, A.; Munro, W. A.; Park, W. T.; *Robson, W. F.; Sinclair, J. A.; Smith, J. B.; Sutton, M.; Wilkinson, F. B.; *Winskell, W. E.; Young, O.

University Gold Medal,		McPhedran, A.
" Silver "	1.	Lackner, H. S.
" " "	2.	Bowerman, A.
" " "	3.	Wilson.
Starr Gold Medal, - -		Lackner, H. S.
" Silver " - -	1.	McPhedran, A.
" " " - -	2.	Bowerman, A.
3rd Year Scholarship, -		Stuart, W.
2nd " " -		Griffin, H. G.
1st " " -		Adair, J.

Sixteen candidates entered for the degree of M.B., and thirty-one for the primary examination. In the third year, two; in the second, six; in the first, five.

* To take one subject over again.

Miscellaneous.

The Contractility of the Spleen.—From the benefit observed to arise in certain cases of splenic leukæmia from repeated electrization, Prof. Botkin of St. Petersburg was led to the conclusion that the nutritive disturbances in leukæmia can be explained by the increase of white blood corpuscles. Prof. Biesiadecki, of Cracow, lately propounded a similar view; but from other reasons (*vide Med. Times and Gazette*, page 552, vol. ii. 1875.) The relation of swelling of the liver to the contraction of the spleen has been lately made the subject of experimental investigation by Dr. Drosdoff and Dr. Botschetschkaroff, of St. Petersburg, with the following confirmatory results. They found (Centralblat, Jan. 29, 1826) that in dogs (1) the spleen enlarges in all its diameters several centimetres, when the nerves of the splenic plexus are divided, and that it contracts again when the peripheral ends of these nerves are electrically excited; (2) that when the contraction of the spleen is produced by electrical stimulation the liver enlarges, its outlines become more definite, its color brighter, and its consistence firmer, and when the spleen again enlarges these signs disappear; (3) that if a prick be made in the liver when the spleen is swollen, scarcely any blood flows, but as soon as the spleen contracts it issues in abundance; (4) that with each contraction of the spleen there is a discharge of white blood-cells into the hepatic blood, as proved by counting the proportion of white to red corpuscles in blood drawn before and during the contraction. It seems probable that the spleen thus rids itself, so to speak, of the white corpuscles, which were stored up in it; (5) if a manometer is attached to the splenic vein, and the splenic nerves are stimulated, the pressure rises in the instrument in proportion to the extent to which the spleen contracts, and it again falls to its former level when the stimulus is intermitted. It does not immediately begin to enlarge on the withdrawal of the stimulus, but takes some minutes before it alters perceptibly in shape. Thus the contraction and enlargement depend not solely on vaso motor influences, but also on the presence of muscular elements in its tissue, such as Müller and others have described; (6) the contractile power of the spleen is not completely destroyed by ligaturing all its vessels, but only considerably diminished. If the arteries alone are ligatured, the enlargement and diminution on stimulation are much less than in the normal state; if the veins alone are tied the organ swells up more, and contracts less powerfully.—*Med. Times and Gazette.*

The Profession and the Drink Question.—The President of the College of Physicians, we are glad to say, presided. on March 30th, at a conference of medical men and clergymen as to the medical aspects of intemperance, at which many very sensible suggestions were made by various members of the profession. We rejoice in every moderate and consistent protest against drunkenness from men who can lay any claim to representing the profession. We know that some of the best medical practitioners are fearful of taking any part in such a movement lest they should compromise their professional independence, or sanction fanatical or sensational views of this question. We share this feeling to a great extent, but we see very urgent reasons for not giving it too much weight. As medical men we know more than any other persons in the community of the physical evil that is being wrought by the large quantities of alcohol which, partly under mistaken notions, are being consumed by all classes of the people. We feel strongly, as we have said before, that a scientific statement of this evil ought to be made by the profession to the Government authoritatively. The very precision which recent labours in physiology and pathology have given to our knowledge will only be an additional guarantee of moderateness and accuracy, and therefore of force, in any statement of the kind we advocate. This is no question of rabid teetotalism, nor of dispute between the pathologist who thinks alcohol does its deadly business through the liver and another who thinks it does it through the kidneys. Both these pathologists could agree in a statement that would impress both the public and public men. It is an urgent question both of pathology and of patriotism that needs to be taken out of the

region of fanaticism, and faced soberly if any check is to be given to the demoralizing vice of drinking. Whence is this statement to emanate? Clearly from the College of Physicians. The question is perfectly cognate with that of the homes of the working classes, on which the College so happily made a representation to the Government, the value of which as a stimulus to legislation was gratefully acknowledged by the Home Secretary. The College of Physicians represents all branches of medicine. But it represents them too timidly. It will die of dignity and reticence if it cannot identify itself with some of the urgent problems of society and legislation. The President has seen his way to preside over a conference of medical men in Shoreditch on the subject of drinking. All honour to him. Let us hope that his successor will soon see his way clear to calling the Fellows of the College together in Pall Mall to give out a statement on this question.—*London Lancet.*

Dorsal Dislocation of the Head of the Femur, with Eversion of the Limb (*The Lancet*, February 5, 1876).—Mr. Annandale reports the case of a sailor, æt. 29, who six months before coming under observation received an injury of the hip from a bale of goods falling upon him. When examined, the injured limb was found to be shortened three-quarters of an inch and *everted* to its full extent. The whole limb was fixed in this everted condition. The great trochanter was displaced upwards and backwards, and the head of the bone could be felt over the situation of the sciatic notch. In addition to these symptoms, Mr. Syme's characteristic sign of sciatic dislocation was present, —namely, that the injured limb could not be straightened without an arching of the spine. If the spine was straightened the thigh became flexed, and if the thigh was straightened the spine became arched. No crepitation could be detected. Having from all these symptoms diagnosed a sciatic or dorsal dislocation, the patient was put under chloroform, and the manipulative method of reduction practised. The bone was readily reduced by flexing and adducting the limb and then making it take a sweep outwards, but it also readily slipped out of the acetabulum again when the limb was moved; and in order to prevent its displacement a long thigh-splint was applied and retained for a month. At the end of this time the patient was allowed to rise from bed and use crutches, and two weeks afterwards he was dismissed, being able to bear considerable weight on the limb. When the limb was examined before his dismissal it was found to be natural in length and position, and it admitted of free flexion, extension, adduction, and abduction at the hip. The only symptom complained of was some weakness of the whole limb; but this was gradually passing off.

The occurrence of eversion of the limb in cases of dorsal dislocation of the head of the femur is quite exceptional.—*Philadelphia Med. Times.*

Homœopathic Credulity.—Gouty and rheumatic readers may take warning of the dangers of lithia from a story in one of the journals, reproduced from an American source. It is the case of Dr. Denham, who "was compelled for a time to relinquish practice in consequence of severe cardiac rheumatism," but who has been so effectually cured as to be chosen as president of a convention to be held in Philadelphia this summer. He consulted Dr. Hering, who at the third interview told him that if "Lith. carb." was not the remedy, he did not know what was. Thereupon Dr. Denham "returned to his home, and not being able to find the desired potency of the *lithium* he procured the third trituration, and attempted himself to triturate to a higher degree. The medicine having been placed in a mortar with the requisite sugar of milk, he began the trituration. It was not long, however, before the exhalations from the triturating drug began to manifest themselves, and the patient succumbed to their influence, lying for some time in a semi-unconscious state. The recovery from this latter seeming complication was slow, but resulted in most complete recovery from his cardiac disease, without further medical aid, thus illustrating the wonderful efficacy of the truly homœopathic remedy, and the care requisite in its selection." If such fearful effects follow the "exhalation" from triturated infinitesimals of lithium, what will happen to the imbibers of Blake's lithia-water.—*The Doctor.*

Differential Diagnosis of Croup and Diphtheria.—Dr. J. Solis Cohen, Medical Record, presents the following differences between croup and diphtheria:

CROUP.	DIPHTHERIA.
Non-specific in origin.	Specific in origin.
Never contagious.	Often contagious.
Not inoculable.	Inoculable.
Not of adynamic type.	Of adynamic type.
Usually sporadic.	Usually endemic or epidemic.
Rarely attacks adults.	Often attack adults.
Always accompanied by exudation.	Sometimes unaccompanied by exudation.
Fatal only by physical obstruction to respiration, whether directly or indirectly.	Often fatal without any physical obstructon to respiration whatever.
No depression of heart.	Marked depression of heart.
Pulse often strong and hard.	Pulse never strong and hard, even though quick and full.
Respiration more accelerated in proportion to the pulse; ratio rarely, if ever, less than one to four.	Respiration not accelerated in proportion to the pulse; ratio usually less than one to four.
Albumen rarely in urine.	Albumen often in urine.
Not followed by paralysis.	Often followed by paralysis.
Would bear antiphlogistics.	Would not bear antiphlogistics.
Rarely attacks more than once.	Often attacks more than once.

In addition to this, it may be mentioned that diphtheria, unlike croup, has never been thought due to excessive plasticity of the blood.—*American Practitioner.*

Researches on the Milk of Women Treated by Mercurial Inunction.—Dr. O. Kahler ('Prag. Vierteli,' vol. iii., p. 39, 1875), has published three observations made on syphilitic women who were suckling, and who had been submitted to mercurial inunction. He could find no trace of mercury in the milk of any of them. He thinks that mercury does not escape with the milk until it is given in quantities sufficient to produce symptoms of poisoning; and he thus explains the positive results obtained by some writers who have experimented on animals. He therefore rejects the views of those who would give mercury to the nurse to cure syphilis in the child.—*British and Foreign Medico-Chirrurgical Reaiew.*

Successful Case of Transfusion.—At a meeting of the Royal Academy of Medicine of Belgium (reported in the *Gazette Hebdom.*, February 11, 1876), a paper was presented, reporting successful transfusion of a patient comatose from carbonic-oxide poisoning. The man, aged twenty-five, was in a severe state of collapse, the result of sleeping near a charcoal-brazier; heartsounds, imperceptible; pulse 130; temperature, 37.6°. Two hours later, respiration became slower, and tetanic convulsions set in. Microscopical examination of the blood showed that the red globules had lost their tendency to form rouleaux. Sixty-seven grammes of blood (no mention of the kind of blood used or the method) were transfused; the patient's heart became more active, a chill followed, and the convulsions ceased. In six hours the improvement was well established, and in eight days the patient left the Hospital.—*N. Y. Med. Journal.*

The Austrian Pharmacopœia.—The Metric system has been introduced into Pharmaceutical use throughout Austria, since January 1, 1876, and for the future all physicians will be expected to prescribe according to it, and all druggists to dispense by it. Tables have been issued for reducing the old grain and ounce weights (the same as we still adopt in Great Britain) into that of the gramme and its fractions; and old prescriptions written prior to the new system, will, if redispensed, have to be so reduced. An excellent feature of the Austrian system seems to us to be, that for poisonous drugs there is not only a maximum single dose defined, but also a maximum collective dose *for the day of twenty-four hours*, which the chemist is forbidden to exceed, unless the prescriber has appended a note of admiration to show that he purposely ordered an unusual dose. We might with advantage take a hint from the Austrian regulations.—*Med. Times and Gazette.*

Canadians in England.—George Herbert Buchanan of the ———— School, and Donald B. Fraser, M.B., Trinity College and Toronto University, have passed the final examination for membership of the Royal College of Surgeons, London, England.

Oil of Sandal-wood in the Treatment of Gonorrhœa.—*By S. B. Merkel.*—I am fully persuaded that the oil of sandal-wood possesses a much greater power in restoring to a healthy state the mucous membrane of the urethra than does either cubebs or copaiba. In no case have I ever known it to produce sickness. There are objections, I admit, to the use of the oil of sandal-wood, on account of the persistent and disagreeable sensation it leaves in the throat, the irritating action it has on the stomach, and the difficulty of obtaining the pure oil, much of it being adulterated and of inferior quality. The first difficulty is overcome when it is given in the form of a capsule; the second, when it is mixed with a tenth part of the common oil of cinnamon; and the third is to be met by selecting a brand of established purity.

In the *United States Medical Investigator* (Hom.) of March 1st, 1876, the Registrar of the Hahnemann Medical College, Chicago, publishes the questions submitted to the candidates for graduation, and concludes his letter to the editor with the following sentence: "*No better index of progress can be given than this, the annual publication of examinations and results.*" The average *per cent.* required to pass a candidate was 70. From the 22 questions on Materia Medica and Therapeutics we select the following: What remedies have the following characteristics. 1. Desires Death rather than fears it; 2. Stools dry and hard as if burnt; 3. Profuse, transparent, acrid leucorrhœa, *running down to the heels;* 4. Trembling carotids; 5. Scanty, slimy menses appear too late; 6. Pointed objects seem to have a double point; 7. Sour sweat on the neck. Average standing of graduating class 91.53 per cent. (Our readers who cannot answer the above questions can look them up.—*Ed. United States Medical Investigator.*

Prolonged Gestation.—Dr. Frank Wells (Boston *Med. and Surg. Jour.*, Dec. 2, '75) records a case in which delivery took place three hundred and four days from the date of sexual congress. The birth was tedious, forceps necessary; almost entire absence of liquor amnii. Child weighed eight and one-half pounds, vigorous and healthy.—*Med. News and Library.*

Milk as an Absorbent.—A correspondent o a morning contemporary, on the 14th inst., draws attention to one circumstance respecting the peculiar properties of milk—that of its power of attracting and absorbing impure matter,—which is worthy of notice, namely: "To the practice of placing a saucer of new milk in a larder in order to preserve meat or game from approaching taint. It is said that not only does it answer that purpose, but that the milk, after a few hours, becomes so bad that no animal will touch it." The correspondent adds: "I think that this little homely fact may, perhaps, interest those who are studying the causes of the Eagley epidemic."—*Med. Times and Gazette.*

We notice that Mr. Stiles, writing in the *Monthly Microscopical Journal*, recommends for wood sections one grain of the finest cake or crystal magenta dissolved in two ounces of spirit, or half a grain of pure aniline soluble blue in one dram of distilled water, to which he adds ten minims of dilute nitric acid, and enough spirit to make the quantity up to two ounces. After staining he washes with spirit, soaks for an hour in cajeput oil, and afterwards in turpentine, finally mounting in balsam or dammar. The cellular tissue takes the blue more readily than the red, the vascular tissue to a great extent retaining the red when subsequently treated for a short time with blue.—*The Academy*, 1876.

Certificate of Lunacy.—"He[y] Broadway
"A Potcarey of Gillingham Certefy that Mr.
"James Burt Misfortin hapened by a Plow in
"the Hed which is the Ocaisim of his Ellness
"& By the Rising and Falling of the Blood
"And I think A Blister and Bleeding and
"meddeson Will be A Very Great thing But
"Mr. Jame Burt wold not A Gree to be Don
"at Home
"March 21, 1809. "*H[ay]. Broadway.*"

We are glad to notice that Mr. Simon was, on the 31st of March last, elected an honorary member of the Society of Physicians of Vienna. Professor Rokitansky was in the chair.

A Case of Aconite Poisoning.—Under the care of *Dr. G. F. Schreiber*, West Brooklyn.—I was called in haste, June 18th, 1874, to see E. B., a labourer, aged 36 years, who had taken two teaspoonfuls of tr. aconite root an hour before, 9 a.m. He had taken it, he said, to overcome the nervousness and insomnia consequent upon a drunken spree. He was having convulsive attacks, coming on at short intervals; had vomited some, and complained of dryness of the throat, coldness and tingling of the extremities, and muscular weakness. The pulse was almost imperceptible, countenance pale and pinched, and skin shriveled and covered with cold, clammy perspiration. I ordered a draught of warm water and mustard, which produced emesis; the matter vomited had the odour of aconite quite strong. I sent for Dr. R. M. Lackey, and asked him to bring with him a Kidder's battery. I had hot bricks applied to the extremities, and body as well, and directed the occasional use of friction with dry warm flannel. While awaiting the arrival of counsel and the battery, he had another vomiting spell, after which he fell back in a state of muscular rigidity, eyes staring, respiration suspended, and to all appearance about to expire. Just then the doctor arrived with the battery, which was hastily set going,, and one pole applied to the nape of the neck and the other over the region of the heart. He was at once relieved of the spasm, respiration became more regular, and he complained of pain from the current. He begged to be allowed to sleep, which was denied him, and he was kept well roused up by the frequent use of the current, interrupted in such a way as to produce considerable shocks. At 12 o'clock m. the pulse was slightly perceptible, and he was more sensitive to the current. An enema of warm water and salt was administered, and a copious fluid evacuation was produced, having the odour of aconite. In making another attempt to raise up he again fell back and seemed about to expire, when a good, lively shock from the battery started him breathing again. Improvement from this time was decided, so that by 3 p.m. he was regarded as out of danger. He slept well the following night and was up the next day, but complained of tenderness over the stomach. No after-treatment was required, as his nervousness had disappeared, and he recuperated rapidly. The treatment in this case, as will be seen, was mainly by the faradic current, which seemed to counteract the tendency of the poison to produce paralysis of the heart. The point of greatest interest in the case is the fact that the patient has never tasted a drop of intoxicating drink since, and from being a confirmed drunkard and generally worthless fellow, has become a sober, industrious man; and this is the greatest and most decided curative effect I have yet observed from the internal use of aconite.—*Medical Press.*

Births, Marriages, and Deaths.

BIRTHS.

On the 17th inst., the wife of W. T. Aikins, M.D., of a daughter.

At 206 Simcoe Street, on the 25th inst., the wife of Dr. Temple, of a son.

MARRIAGE.

On Thursday, May 25th, at Christ Church, R.E., by the Rev. B. B. Ussher, Albert Angus Macdonald, M.D., of Guelph, to Frances Elizabeth, eldest daughter of George L. Beardmore, of Toronto.

VIRGINIA MEDICAL MONTHLY.

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TORONTO, JULY, 1876.

Selections: Medicine.

RELATIONS OF URINE TO SKIN DISEASES.

BY L. DUNCAN BULKLEY.

* * * * *

We come now to the practical bearing of our study of the relations of the urine to diseases of the skin, namely :—

THERAPEUTICAL CONSIDERATIONS.—First we will take the matter of diet, hygiene and exercise. The variations in the urine both in connection with normal alimentation and the ingestion of injurious food have been very conclusively demonstrated by others, and it were well to regard these physiological considerations in the treatment of skin diseases. When the urine exhibits deposits of uric acid, urates, and oxalate of lime, there is evidence of imperfect action of the system, a sub-oxidation, whereby, in place of the complete combustion of the food, and the perfect elaboration of the products of dis-assimilation into urea, carbonic acid, water, and other elements fails, and oxalic acid represents, in the main this failure in respect to starchy and saccharine food, and uric acid and the urates the same for nitrogenous elements; (though it is true that this is not absolutely the fact in every instance, oxalic acid being also derivable from albuminous compounds.) These changes in the urine, then, which we have shown to be so very common in patients with affections of the skin, show the latter to be more connected with assimilative disorder than is granted by some, or apt to be thought of by most practitioners. I cannot here enter further on the subject of the animal chemistry of these changes, but will merely state the practical lessons I have learned from them, without even stopping to give credit to the sources of my knowledge.

Over eating is not at all uncommon in skin patients; by this means undue amounts of alimentary substances are taken into the blood and the urinary disorder is but an indication of this, an effort of nature to rid the system of unneeded supply; nature, as it were, considers it unnecessary, or is unable, to fully oxydize this waste matter, and throws it off partially disintegrated. Or, there may be over eating in one particular direction, one patient takes more sugar and starch than is needed, another more meat; a proper regulation in this respect conduces to health, and consequently to recovery from skin diseases. Or, again, the amount taken at any one time may be greater than the organs can care for, some of the proximate elements enter partially elaborated and must pass off in the same manner; the remedy for this is frequent and small supplies of proper food, rightly prepared. But these urinary abnormalities, though often beneficial provisions of nature, cannot continue long without evils attending them, as we saw that experimentally the circulation of excrementitious substances caused disease.

Other elements in the production of urinary disorders are also such as induce skin disease, thus the use of fermented wines and ales often are the cause of both, or want of proper and sufficient air and exercise. No one of the elements which tend to good or bad health should be overlooked in treating skin diseases.

When speaking of the relations between the skin and kidney-functions, the alterations in the urine attending the use of baths were spoken of. This is a point too often neglected in Dermatological practice. We found that daily bathing augmented the total solid constituents of the urine, the urea and uric acid being increased, and frequent bathing, especially in baths slightly alkaline, and proper subsequent friction to the skin, will do much in removing cutaneous disease, both by accelerating the assimilative processes and keeping the pores of the skin in a conditon to do their work. The benefits from visits to the mineral springs of Europe are largely due to this fact, Dr. Todd,* when speaking of acne, says, "in many diseases of the skin we have found the greatest benefit from sponging sound parts of the skin two or three times every morning, with a lotion consisting of two drachms of nitro-muriatic acid and two pints of water."

Finally, many medicines are of benefit in diseases of the skin by virtue of acting in a manner calculated to affect the urinary secretion. Dr. Easton† reports most satisfactory results from the use of acetate of potassa in eczema and psoriasis, given in half drachm doses three times a times a day, an experience which I have long verified, and he gives some interesting details of the urinary relations during its administrations. The smallest amount of urine voided by any of his cases when under its influence was 54 ounces daily, the largest 120 ounces, an increase of about 14 ounces as a minimum, and 80 ounces as a maximum over that in health. The total solid constituents were also increased to 1026 grains daily for a minimum, and 1320 for a maximum, or from 200 to 500 grains of solid matter daily above the average of health, and with this increase the skin affection rapidly improved. The same is shown in the case I have quoted of Dr. Mapother, where under the use of the citrates of lithia and potassa the total daily solids excreted by the urine, as estimated roughly by specific gravity, increased about 200 grains as a minimum and 400 as a maximum, above that observed in the same patient before treatment. The use of alkalies in treating diseases of the skin is of old date and urged in strong terms by those with much experience in these affections. Dendy* thinks their efficacy, especially during the period of childhood, due to their "improving the quantity and quality of the renal secretions, which, in skin diseases, are often so unhealthy." Colchicum we have seen to have this effect in urticaria, and the mineral acids in proper cases do the same.

From what has preceded it will be seen that I cannot subscribe to the views entertained by some as to the local nature and treatment of the many affections of the skin. The German school, in which I was myself instructed, has done much to improve local cutaneous therapeusis, but it has also done much to discredit the dependence of skin lesions upon internal disorders, and thereby has, in my opinion, done much harm. It is true that a large measure of success may be obtained by the judicious employment of local remedies and that therein much of the skill of the specialist is often shown, but it is also quite as true, or even more certain that we can afford most permanent and satisfactory relief in certain skin diseases by a proper regulation of diet, exercise and medication tending to restore and keep the assimilative functions in perfect order.

* * * * * * *

In conclusion, I may add that although as yet a sufficient number of accurate observations have not been made in the various diseases of the skin to enable us to state positively that such and such changes belong necessarily to one disease, and such others to another, still the indications of urinary derangement in these affections are such as to invite further study, and at the same time to furnish ofttimes very valuable assistance in the daily treatment of diseases of the skin.—*Archives of Dermatology.*

Sir William Ferguson is dangerously ill. He is reported to be suffering from kidney disease and hypertrophy of the heart. Sir George Burrows and Dr. George Johnson are daily in attendance.

*Copland's Encyclopædia of Pract. Med., 1833, Vol. 1. p. 31.

†Monthly Med. Jour. 1850, p. 422. Braithwaite, vol. xxi, p. 245.

*Diseases of the skin during infancy and childhood. Phil. 1841, p. 20.

HOW TYPHOID FEVER IS SPREAD?

Dr. Frankland, in a recent address to the Fellows of the Chemical Society on the Organic Impurities of Drinking-water, adduced, as a striking instance of the persistency of the typhoid poison when diffused in water, the outbreak of a violent epidemic of typhoid fever in a Swiss village through the use of spring-water which, after contamination with the poison, had filtered through nearly a mile of porous earth, but had nevertheless lost none of its virulent properties. The occurrence in question is one of the most remarkable, if not the most remarkable, on record, and the circumstances in connexion with it have been exhaustively investigated by Dr. A. Hägler, of Basle. The facts have been set forth by the late Professor Parkes in the last volume of the Army Medical Bluebook, and briefly by Professor Frankland in a communication to *Nature*.

In the village of Lausen (on the railway from Basle to Olter) epidemic enteric fever had never occurred in the memory of man, and the neighbourhood was also free. The ground consists of marl and lime, and is tolerably water-holding. Certain well-water was only used by the inhabitants of six houses, while the other inhabitants (780, in 90 houses) used the water from a public spring which arises at the foot of a hill, the "Stockholden." This water is received into a reservoir, and then led, by wooden pipes, into four stone tanks. On 7th of August, 1871, ten inhabitants were attacked, and, in nine days more, fifty-seven persons were sick with typhoid fever. These cases spread over the whole village using the spring water, but the inhabitants of all the houses which had wells of their own were entirely spared. To the end of October, 130 persons were attacked, besides several children; and, towards the end of the epidemic, two persons were attacked who lived in the houses which did not have the water from the common spring. The proof that the "spring-wasser" had distributed the "infectious matter" was based on the following:—Stockholden is a hill 300 feet high; its westerly spur extends into a little side valley. Through this little valley runs the Furler streamlet, beyond which the village of Lausen ends in the "Ergolz." In the Furler valley were some scattered farm-houses. In one of these farm-houses, in June and July, two persons were attacked with typhoid, and later on two others. The latrines of these houses were all in direct connection with the brook, but this opens into the Ergolz *below* Lausen. After accurate inquiry it was found, however, that the Furler brook communicated directly with the spring descending from the Stockholden. It was known to the inhabitants of Lausen that when the meadows in the Furler valley were watered, the spring increased in amount; besides, about ten years ago, 100 paces below the infected houses in Furler valley, the upper earth strata had fallen in, and formed a large opening, into which some of the water of the Furler brook flowed without again reappearing. After the hay harvest in July the meadows were water-manured, and the spring in Lausen shortly afterwards obtained a turbid and bad-tasting water. The ground was geologically explored, and when the above-named spring was dug up, salt water was poured into the Furler brook and made the spring in Lausen quite briny. As Professor Frankland puts it in his communication to *Nature*, the passage of water from the irrigated meadows to the spring at Lausen was proved by dissolving in it, at the meadows, eighteen hundred weight of common salt, and then observing the rapid increase of chlorine in the spring water; but the most important and interesting experiment consisted in mixing uniformly with the water fifty hundred-weight of flour, not a trace of which made its way to the spring; showing that the water was filtered through the intervening earth, and did not pass by an undergound channel. The conclusion is obvious—viz., the risk which attends the use, for dietetic purposes, of water to which even so-called purified sewage gains access, although, as in the case of Lausen, such water may be used with impunity until the moment when the sewage becomes impregnated with typhoid poison.—*London Lancet.*

We regret to learn of the death of Dr. Andrew Wynter, at his residence, Chestnut Lodge, Grove Park, Chiswick.

Gerhardt's Plan of Emptying a Distended Gall-Bladder Caused by Gastro-Duodenal Catarrh.—Dr. Forcheimer reported that on May 3rd a child 1½ years of age was brought to him, the mother stating that two days previously the child had vomited and had had loose bowels, and a slight fever. It then suddenly became very yellow. When seen by the speaker it was constipated. The liver dulness was slightly increased. In the fissure for the gall-bladder he found a small, smooth, round tumor. The diagnosis was readily made. There was stenosis of the ductus communis and distension of the gall-bladder with bile, caused by catarrh of the duodenum. He immediately adopted Gerhardt's plan of squeezing the bladder between the fingers, when he felt a slight gurgling, showing that the mucus at the extremity of the duct had given way. When brought back two days afterwards, jaundice had entirely disappeared. When excessive force has been used in this procedure the gall-bladder has been ruptured, causing peritonitis and death. Another plan sometimes successfully employed by Gerhardt is the use of the Faradic current, by which means the muscular tissue of the gall-bladder has been forced to contract and thus expel the contents of this viscus. Dr. Whittaker remarked that in order to avoid the danger of rupture referred to by the previous speaker, the gall-bladder had been frequently tapped from time to time, and the fluid withdrawn without any unpleasant symptoms.—*Cincinnati Academy of Medicine.*

Trephining in Epilepsy.—(*Nashville Journ. Med. and Surg.*, Feb. 1876) Professor W. T. Briggs reports the case of a man, aged 30, who had been subject to epilepsy for many years, the disease following a fall upon the head. An old scar was found in the scalp about the middle of the right parietal bone, with a slight depression. A disk of bone was removed, having a small exostosis on its inner surface. At the end of six weeks he had entirely recovered from the operation. All his nervous symptoms had disappeared, and there had been no return of the convulsions which formerly had occurred weekly.

The Treatment of Tapeworm.—A return of the quantity of the several drugs in most general use for the treatment of tapeworm in the public hospitals of Paris during the last ten years has been made by the Director of the Central Pharmacy. A comparison of the relative quantities consumed during the first and second halves of the decennium, supplies an interesting indication of the professional verdict as to their relative value. The average quantity of kousso consumed annually was more than twice as great during the four years since 1870 as during the six years before. The amount of pumpkin-seeds employed has not quite doubled; that of pomegrante-bark has remained almost stationary; and that of the male-fern has more than doubled. Kousso and male-fern thus appear to be the remedies on which Parisian experience shows most reliance can be placed. M. Colin, however, in a recent paper on "Tænia in the French army," advocates very strongly the use of pomegranate-bark. He asserts that when the precaution was taken never to administer a purgative before the vermifuge, the head of the worm was expelled, in three cases out of four, by a single dose. A purgative given before simply tears away the segments, leaving the head attached, and the head is then undisturbed by the special medicine.—*Lancet.*

Gallic Acid in Albuminuria.—Dr. J. T. Jamieson (*American Practitioner*) records two cases of albuminuria, as a sequel to scarlet fever, successfully treated by gallic acid. He gave teaspoonful doses of the saturated solution every two hours. He thinks that the gallic acid is carried unchanged to the congested and inflamed capillaries of the secernent portion of the kidneys, acts as an astringent and tonic to them, and promotes their contraction, thus arresting the exudation of the red blood corpuscles and promoting the normal secretion of urine. He has seen no bad effects arise from the free administration of the acid. It does not disturb the stomach or interfere with the appetite or digestion; but it does tend to produce constipation, so that the occasional use of a laxative is rendered necessary.—*Edin. Med. Journal.*

Surgery.

"CALAMITIES OF SURGERY."

This is the title of one of the very valuable series of "Clinical Lectures and Essays" recently published by Sir James Paget. It contains so many hints for the direction of those who devote themselves to the subject of surgery that a brief synopsis of it will not be unprofitable.

The author treats the subject under two leading heads; first, the care that the surgeon should exercise in deciding upon and recommending an operation; and secondly, the various necessary precautions that should be observed after an operation has been decided upon.

Under the first division of the subject, the author speaks as follows:—"First of all, the consideration that you are liable to these calamities should be an incentive to the most earnest and continual study of your profession, that you may avert all avoidable ignorance; and to constant discipline in watchfulness, that you may overlook nothing that can contribute to a patient's welfare."

"And you should study very carefully all of what are called the minor points of your profession. . . . I refer chiefly to the necessity of cultivating skill in dressing wounds, in the completion of operations, in the looking to all the seemingly little things that, after an operation, minister not only to a patient's comfort, but to his welfare." . . . .

"Next, let the liability to these calamities move you never to decide upon an operation except in consideration of the patient's interests alone." This is a warning which, it is to be feared, is not always as conscientiously followed as it ought to be. Rising surgeons, in their desire to acquire a reputation in their profession, too often undertake operations of doubtful propriety, from the fact that the issue of such operations is at best only problematical. On this point Sir James Paget very judiciously says:—"When an operation is decided on, you may add a desire for your own reputation to the motives that will induce you to do the best you possibly can for the patient; but this, which is a very fair motive for the careful performance of an operation, is a very foul one in determining whether an operation should be done or not."

The next item of useful advice which the distinguished author presents is, "never to decide upon an operation, even of a trivial kind, without first examining the patient as to the risks of his life. You should examine him with at least as much care as you would for a life insurance. It is surely at least as important that a man should not die or suffer serious damage after an operation, as that his life should be safely insured for a few hundred pounds." After dwelling upon the importance of observing this precaution, at considerable length, Sir James Paget says in conclusion:—"If I were to count the number of preventible calamities in surgery that I have known, I should find the majority of them due to the oversight of personal defects in the patients operated on; defects in the habits, the constitution, or the previous diseases, which ought to have been ascertained before the risk of the operation was incurred."

Another most excellent piece of advice is conveyed in the following language:—"When you have decided on an operation, never make light of it. Never talk to the patient flippantly about its being what is called 'nothing,' a mere snip, a mere cut, a mere this or that. . . . You need not alarm the patient; you may say that the risk of an operation is not greater than that which he would incur for much less sufficient motives. . . . So you may fairly guard yourselves, and give your patients a just measure of warning, by saying that the risk of a proposed operation is not greater than the risk of this or that thing which they willingly do for amusement. But unless you are prepared to say that the risk is not greater than ought to be incurred for the good which may be expected to follow, you ought not to do the operation at all."

Upon the amount of good likely to follow an operation, Sir James Paget says:—"The surgeon alone can in most cases estimate it. In most cases, therefore, we must take the whole responsibility of operations, for it is only on our statements that patients can rely in

judging whether they should submit or not, and most of them, even when they have our statements before them, are quite incapable of clearly and soundly judging. But there is a class of operations, in what I have called decorative surgery, in which we may justly put upon patients a much larger share of responsibility than they ought to bear when the question is one of life or death. When people want not to be cured of absolute deformity, which hinders their success or comfort in life, but to have this or that done of which it does not matter whether it is done or not, except for some personal vanity, let them understand that the operation is not altogether free from risk, and then let them take the whole responsibility of the matter."

Under the second division of the subject, Sir James Paget speaks as follows:—"Supposing, now, an operation to be decided on, first, don't be too ready to operate in your own houses or in your own rooms." After detailing the disastrous consequences of the removal, in his own room, of a simple encysted tumor from the back of a wealthy London merchant, by a surgeon of distinction, in the beginning of his professional career, the doctor goes on to say: "You may do an operation there with all dexterity and care, but you do not know what the patient will do afterwards. Especially let me advise you not to sound a patient for the first time, or to pass a catheter in a man of questionable general health for the first time, in your own room.

Another judicious precaution is put in the following words:—"Do not operate upon even small inflamed parts. . . . A man will bear a little tumor or a small cyst, or a small pile, so long as it is not inflamed; but when it inflames it teazes him, and he asks to have it removed with all speed. Don't do it. The risks of operating on an inflamed part are manifold, and much greater than the risks of operating on one that is quiet." He then relates the fatal issue of an operation by himself upon a simple encysted tumor upon the abdomen, which was acutely inflamed at the time of the operation, as illustrating the wisdom of observing this precaution.

"For another rule, always look carefully to the condition of the room or the house in which your patient is living, and set aside, so far as you possibly can, all the risks that may thus be incurred. Look to the sanitary arrangements about the man." As an illustration of the wisdom of observing this rule, the author gives the details of a case of phymosis, upon which he operated by simple division of the prepuce, and which was followed by sloughing of the integuments, over two-thirds of the penis, and very nearly the whole of the scrotum. On looking about for the cause of this untoward result, he found that an article of furniture which he had before supposed to be a book-case, was a water-closet, the offensive smell from which had poisoned the atmosphere of the patient's apartment.

Another most salutary caution is put as follows:—"Never do an operation if you can cure the patient by any reasonable medical or other means. There are a considerable number of operations done for cases that should not be operated on at all; and these are amongst the very class in which the mortality of minor operations comes."

"Then, for another rule," says the author, —'If a disease can be cured by a bloodless operation as well as by one with cutting, choose the bloodless. This may be done in many more instances than you are apt to think." Cysts of the scalp are given as an illustration of the cases in which removal by the knife is unnecessary, all cysts being removable with much greater safety by caustics. The ligature of hemorrhoids is another example given of the cases that sometimes prove fatal when caustics would have served as useful a purpose, and been free from the risks of the ligature. So with cancerous warts and ulcers that occur about the face.

"Another rule: Be quite clear about carrying out carefully the last stages of all operations. I suspect that everybody in operating, when he has passed through the sort of mental tension in which he performs the most difficult part of what he has to do, when his attention has been completely occupied in some difficult task to be achieved, next feels his mind relaxed, his attention less keen, less ready for exercise than it was before. Be sure that these

are times of danger to your patient. As soon as the attention ceases to be as keen as possible, you are in risk of doing some mischief." . .

"One more rule I will give you: Look carefully to your apparatus. I have no doubt that you will look very carefully to the edges of your knives and your saws, and all things that are mighty to handle; but look to the plaster, look to the ligatures and the sutures, and all the things which are commonly called minor. When I have seen Sir William Ferguson and Mr. Spencer Wells operate, I have never known which to admire most; the complete knowledge of the thing to be done, the skill of hand, or the exceeding care with which all the apparatus is adjusted and prepared beforehand. The most perfect plaster, the most perfect silk, not one trivial thing left short of the most complete perfection it is capable of. I have no doubt that the final success of their operations has been due just as much to these smaller things as to those greater things of which they are masters. In contrast with their work, I have seen operations performed with great skill; and a piece of bad plaster or bad silk, or something left at home, has put the patient's life in danger. Not long ago, I remember, a patient had secondary hemorrhage after an operation, and the reason was that the sticking-plaster was bad. One of the things that was to control the hemorrhage was pressure by plaster; the plaster slipped, and the patient ultimately died of hemorrhage. Many an operation has been spoiled by bad silk, or bad needles, or bad something that was thought too trivial for care. Surgery could supply only too many illustrations of the wise proverb against those that despise small things."

The concluding clauses of this lecture contain such valuable counsel, especially to the young surgeon, that they are well worthy of being respected. The author says:—"There is but one thing that I am afraid of in telling you the risks and dangers that I have met with, and that is that you may over-estimate the probabilities of them, and be afraid of the responsibility which you must undertake. Well, after all, this incurring of responsibilities is decided rather by temper than by knowledge. There are some people who are ready for anything; some that under difficulties shirk all they can. But of this I am quite sure, and you will see it proved, not only in surgery, but in every calling, the men who are most ready to take responsibilities, and to bear them lightly, are those who can best estimate beforehand what are the risks and the difficulties they incur; the men who, knowing what is to come, can therefore face it most bravely and with most success.

"Therefore study fairly and fully, beforehand, all the things that may occur to you in an operation and after it. Make yourselves, as far as you can, masters of each case, and generally masters of your whole profession, and then you will neither be afraid of your responsibilities nor ashamed of your failures."

NOTE ON THE TREATMENT OF TETANUS BY NERVE-STRETCHING.

BY GEORGE W. CALLENDER, F.R.S.,

Surgeon to St. Bartholomew's Hospital.

In a paper read before the Abernethian Society,* Mr. Milner has advocated the treatment of tetanus by nerve-stretching, and in some observations on this operation upon nerve-trunks,† I have expressed my regret, in narrating a case of tetanus, that the peroneal nerve was not exposed and stretched. Since this was written no case of traumatic tetanus has come under my care, but had the opportunity been given me I should certainly have planned an operation such as I have indicated, supposing, of course, that the nature of the case permitted me to stretch a nerve-trunk between the site of injury and the nerve-centres. I am glad to hear that quite recently M. Verneuil has had under his care in La Pitié a case which he will, I hope, shortly publish. A man had suffered from a severe crush of the hand, and, following this, showed the symptoms of tetanus. M. Verneuil exposed the median nerve at the elbow, and the ulnar at the wrist, and proceeded to exercise traction on them. The patient recovered completely.

I hope that this note may lead to a further

* St. Bartholomew's Hospital Reports, vol. xi., 1875, p. 287.

† *The Lancet*, June 26th, 1875; Clin. Soc. Trans., vol. vii., 1874, p. 100.

trial of this method of treatment. The operation is not a severe one. The nerve is exposed and is stretched, when freed from its surroundings, by traction with an ordinary vulsellum, from its central connexions. No harm is likely to be sustained as a consequence. There is now abundant evidence, in the cases reported by Billroth, Nussbaum, and myself, of the tolerance with which nerves submit to forcible stretching, so far as the after-performance of their functions is concerned. In view of the unsatisfactory results of the treatment of traumatic tetanus as at present conducted, there is full justification for the performance of the operation as, at least, a last resource, although I should myself advocate its trial, as in the case under the care of M. Verneuil, as soon as the signs of the disease are distinctly recognized.

LITHOTOMY AND LITHOTRITY IN LONDON.

In a paper read at the Medical Society of London on March 13th, Mr. Walter Coulson gave a statistical review of the results of these two operations in the London hospitals. The following were some among the principal conclusions at which Mr. Coulson arrived from the statistics furnished in his tables: Considering the general results of the two operations massed together, the author found that the number of cases of vesical calculus treated by operation in the four great hospitals during five consecutive years was one hundred and forty-eight, while the number of deaths was twenty-four. The general mortality was, therefore, one in six and one-sixth. At St. Peter's Hospital during the same period, the number of operations was sixty-seven and the deaths six, the general mortality being one in eleven and one-sixth, or nearly one-half. This remarkable difference the author attributed to the kind of operation selected. In the great hospitals lithotomy is the operation chiefly performed, while at St. Peter's the most frequent operation is lithotrity. This is a general view only. The question of age must be considered if we institute a comparison of frequency between the two operations. In some reports ages are given, in others not; but, allowing a proportion of one-third for persons under sixteen years of age, the tables show that in the great hospitals the proportion of adults cut to adults crushed is as eighty-two to twenty-nine. Hence lithotrity is applied to one-third of the total number of cases only. At St. Peter's, where the ages are recorded, the author finds that lithotrity is applied to three-quarters of the cases operated on. M. Civiale had long ago made the same remark, showing that the great hospital surgeons of Paris applied lithotrity to one-third of their cases only, while he applied it to three-fourths. Several returns from large provincial hospitals seem to show a similar preference of lithotomy. The preference, however, is more clearly shown in one of the tables, from which it follows that the total number of operations of lithotrity in the four great hospitals during a period of five successive years was twenty-nine; while at St. Peter's, during the same period, the number was forty-four—considerably greater than all the four put together: results, however, he said, form the most important point to consider. In the great hospitals the death-rates of lithotrity and of adult lithotomy are nearly equal, being as six to seven. At St. Peter's lithotrity is twice as successful as lithotomy. Again, the author pointed out that the reports of the four great hospitals show, for lithotrity, twenty-eight cases with five deaths, while at St. Peter's the cases were forty-three and deaths three. Finally, the author brought to light a remarkable coincidence between the results of lithotrity as applied in the three special departments of Paris, University College, and St. Peter's. In the special department of University College Hospital the mortality of lithotrity is one in sixteen. At the Necker Hospital the mortality is one in 15.6 (for twelve years). At St. Peter's (for five years) the mortality is one in 14.3. The author concluded that the difference of results often exhibited by the tables pointed toward a neglect of lithotrity in the great hospitals, and, he added, to the necessity of rendering the treatment of vesical calculus by the operation of lithotrity a special department of surgery. The latter conclusion is not, to our mind, an obvious one.—*Brit. Medical Journal.*

Medullary Sarcoma.—Mr. H. G. Croly exhibited a specimen of medullary sarcoma of the testicle. The patient from whom the specimen was taken was a man 40 years of age, and was admitted within the past fortnight into the City of Dublin Hospital. The right testicle was of very considerable size, and as far as could be ascertained from the history of the case had been six months growing. According to the statement of the patient, he had received no injury whatever. The tumour presented the usual appearance of these malignant growths of the testis—flattened sides, deceptive fluctuating feel, and was enormously heavy in proportion to its size. There was no thickening of the spermatic cord, and as far as he (Mr. Croly) could discover, no enlargement of the glands, either in the lumbar region, groin, or pelvis. In order to make himself satisfied as to the nature of the tumour, finding it fluctuating, he punctured it, and drew off 2 oz. of hydrocele fluid. As that did not make any difference in the size of the tumour, he then plunged a trocar into the substance of it, and nothing came out but blood. Before the tumour was cut into, it presented the kidney-shaped appearance, and on making a section it resembled brain. It was a well-marked example of *fungus hematodes*, or what was known at the present day as "medullary sarcoma." Dr. Barker, the curator of the museum, had kindly made a microscopical examination of the specimen, and he stated that it was a well-marked example of cerebriform cancer. It was magnified with a power of 500 diameters. Mr. Croly also showed another specimen, for the purpose of illustrating the fact that the disease occasionally attacked both testicles. The second specimen was removed from the body of a young man under his care in hospital.—*Medical Press.*

Applications in Urticaria.—Prof. Hardy recommends the following lotion to be applied several times a day in order to allay the itching in Urticaria:—Chloroform ten, and oil of sweet almonds thirty parts. In obstinate cases he prescribes corrosive sublimate $\frac{1}{10}$th to $\frac{1}{7}$th of a part, alcohol ten parts, and distilled water ninety parts. He gives also internally alkaline medicines, and if these do not prove efficacious he resorts to arsenic.—(*Union Medical.*)

Enchondroma.—Mr. W. I. Wheeler exhibited the third or ring finger of a girl which he had removed on Thursday week. The cast which he also exhibited showed the condition of the finger on the admission of the patient. The patient was 17 years of age, and about nine years since a door slammed on the finger, and two years afterwards a tumour began to grow—that was the tumour which implicated the second and third phalanges. Another tumour—at the first phalanx—commenced to grow a few months afterwards, and these tumours gradually increased until they attained their present size. The larger tumour is about the size of a walnut, and the smaller one about the size of a hazelnut. The patient complained of considerable pain, and was unable to use her hand, and consequently—although the tumours were on her right hand—her left hand and arm were very much more developed. On examining the tumours they proved to be enchondromatous, and were elastic to the touch, and on cutting into the larger one it had rather a crisp feel, and the skin expanded for the purpose of its accommodation, but the skin was by no means contaminated by the tumour itself. He asked the curator of the museum, Dr. Barker, to examine these tumours microscopically, and he had stated that the large one was a specimen of simple enchondroma, full of cartilage-like irregular cells, with communicating thread-like connections. It appeared to him (Mr. Wheeler) to have been developed from connective tissue. It was not attached to the bone. There was no plate of bone connected with it. The small tumour commenced in the medullary cavity of the bone, and was of two forms—the hyaloid, and, he might say, mucoid forms of enchondroma, and showed large oval cells and also branched or stellate cells.—*Medical Press.*

Injection of Air into the Bowel for the Relief of Strangulated Hernia.—Dr. Moritz Egger reports the following case in the *Med.-Chir. Centralblatt*, No. 4, 1876: He was called last July to see a female, seventy-nine years old, who was found in bed, suffering from intense abdominal pain, and with knees drawn up. She stated that, up to the present illness,

she had always enjoyed good health, but that three days before, while at work in the field, she suddenly experienced abdominal pain, which gradually increased to such a degree at night that assistance had to be called. She had had no passage since the commencement of the attack. The patient presented all the symptoms of intestinal strangulation, with nausea, and the anxious expression of countenance, and on examination a tumor about the size of a hen's-egg was found at the site of the right inguinal canal. After giving morphine internally and making warm applications externally, and after an enema, taxis was repeatedly tried without success. The patient refusing an operation, taxis was again tried ineffectually on the following day, when the patient was almost collapsed, and stercoraceous vomiting had set in. The author then introduced a long elastic tube into the rectum as far as it would go, and began to inject air slowly. After a time, the intestinal coils could be seen through the very thin abdominal walls to become distended, and suddenly a peculiar rolling noise, as if the air had overcome an obstruction, was heard, after which the hernia was discovered to have disappeared. Air was then allowed to escape from the tube, and the latter was gradually removed. Half an hour later the patient had a large stool, and then slept; five days afterward she had entirely recovered.—*New York Medical Journal.*

Excision of the Scapula.—Mr. McCormac, of St. Thomas' Hospital, on May 10th, excised the scapula and outer end of the clavicle for a very large tumour of the former bone. The nature of the growth was a mixed enchondroma and myxoma. The operation was completed in twenty-four minutes. There was very little hœmorrhage, although the subclavian artery was exposed, and the subscapular had, of course, to be divided. After the operation, the flaps of skin fell together readily, although a good portion of the integument had to be removed with the growth. On May 19th, the case was doing extremely well, under antiseptic dressing.

Midwifery.

PROFESSOR BUCKINGHAM ON VERSION.

From the excellent "Notes of a Lecture" delivered by the Professor of Obstetrics at Harvard Medical School, and published in the *Boston Medical and Surgical Journal* for February 24, we extract some of the useful practical hints. Called to the patient and about to examine her, he says:—

"But perhaps the pulse is very feeble and very quick; her skin, which a few hours ago was moist and warm, has become cool, and she has had no pain for some time before you saw her. On the whole, then, it would be as well to wait for reaction to come on. If you interfere now, you may cut off the small chance which she still has. The doctor or midwife, who has been with her for hours before you came, has forgotten to feed her, and has neglected to see to her bladder. All he has been trying to do has been to hurry a case which would have done better if left alone. Give her any stimulant which she can take—wine, brandy, rum with milk, or broth, and if her depression be great let her have an opiate. 'An opiate,' you say, 'will put her to sleep.' Perhaps it will,—perhaps not; but I should hope for the former effect. If you can get her a few hours' sleep, she will wake with new strength, and you may go on with the turning or any other operation with much more probability of saving your patient; but if she is so very weak, the dose of opium which would produce ordinarily a long, and perhaps a suspicious or a fatal sleep, will simply stimulate her. Perhaps she cannot retain the opium; very well, throw under the skin an eighth or a sixth of a grain of morphia; and if in half an hour she is not positively warmer and more quiet, with a slower and stronger pulse, repeat it. As soon as this has been done, and before you begin to pass your hand, see to the bladder. Use a long gum-elastic catheter, and do not keep poking about under cover to find the meatus. Neither delicacy nor comfort requires this. See where your catheter goes. If you do not, you may put it up into the uterus in-

stead of into the bladder. . . . . Keep as calm as you can. You will learn nothing by being excited or hurrying. First of all, wash your hands clean. Use hot water, soap, and a nail-brush. If you get into the habit of doing this work without washing, you will soon get careless and go from some case of contagion to do your work. . . . . You may feel the child's ribs or an axilla, which is not to be mistaken for the cleft of the nates. The hand may be the part you first touch; do not mistake it for a foot. How is this possible? Why, the parts may be so contracted about your hand that your touch is very much impaired. Still, you may be able to close the fingers into the palm, and you may be able easily to make out the thumb. . . . . Suppose you have a foot, draw it down. It does not advance. Well, do not let it go back. Hold it firmly, and, during the next interval between pains, manipulate with the other hand on the outside of the abdomen, and you will soon find a change taking place in the form of this, and an advance going on. If not, you feel sure that if you could get both hands into the uterus you could easily turn the child. That, of course, is impossible, but you can many times do what will be equivalent to this. With the help of an assistant you can pass a noose over your forearm and up over the ankle of the child. That is as good as one hand, and will enable you to make traction yourself; or, still better, you can let an assistant draw steadily upon it, while with one hand in the uterus and one outside you manipulate to advantage. If the child is surely dead you may grasp the foot with a strong forceps instead of using the cord.

"But suppose you are sure that it is a hand, do not be alarmed. If there be room enough, let it alone, and hunt for a foot. You will be surprised at the amount of room in the uterus. You will be astonished at the number of limbs that you can feel—knees, elbows, hands, and feet seem to be everywhere. . . . . We will suppose that you have got a hand and there is not room to feel for anything else; pull that down as far as you can,—and you need not fear making the case more difficult by doing so. Supinate the hand in the vagina, or out of the vulva if you can get it as far, and thus find out which hand it is, and which way the child is lying. If the thumb and your thumb are on the same side when the palms meet each other, you will know that this hand corresponds with the one you are examining with. If the thumbs do not come together they are not hands of the same side. Furthermore, the palm of the supinated hand is aiming exactly in the direction of the anterior surface of the body, and the thumb is pointing in the direction of the head. Put a cord around the wrist to keep the extremity on one side or the other of the pelvis, while you again introduce the hand, and knowing where the head lies, where the anterior part of the body is, and where the back of the child is, you will have no great doubt about the position of the feet. . . . With all the care you can exercise, with all the knowledge you may possess, and with all the assistance you can have from others, these cases are frequently fatal to the child, even when you know that it was alive up to the time of the umbilicus passing out. You will often be surprised that your case has not terminated as you had anticipated. Do not promise too much. You may be mistaken in the result of your examination. You may be positive, during examination with a cramped hand, that there are more fœtuses than one. You may be sure that the two hands that you have felt, or the two feet that you have reached, are of different sizes, and belonging to twins, and yet you find one child only. The truth is that everyone makes mistakes sometimes. If he says that he never made a mistake, you may be sure of this—either he does not tell the truth, or he has had a very limited business.

"And for the head. Still have the external abdominal pressure kept up, so that the uterus may not relax, and so that the chin may be well forced down. Now is the time, when the cord is most compressed; and a finger in the mouth, if the vagina be well dilated, and the perineum drawn a little back, will allow it to gasp, perhaps, and live a minute longer than it otherwise would. Surely it has sometimes been the case that a minute of intra-vaginal gasping has saved a life. . . Remember the axis of the curve through which the child is passing, and do not pull it forcibly forwards against the

pubes, nor too far backwards against the sacrum. Remember, also, that by getting an assistant to put a finger into the vagina, and press back the perineum, you will cut off a part of the curve, and shorten the distance the head has to come. If it is retained when so far down, you can frequently disengage it by pressing a little backwards, and with a forefinger directing the chin a little to one side or the other."

NOTES OF A CASE OF HERPES GESTATIONIS.

BY BEVERHOUT THOMPSON, M D., NEW YORK.

I was requested by Dr. Dew, July 7th, to see Mrs. M— a young married lady, twenty years of age, pregnant for the first time, eight months advanced; general health good, appetite tolerably fair, slightly constipated. On the 3rd of July her hands and feet began to burn and itch, causing her to scratch the parts; the itching increased, and by the 4th became very severe, when she noticed an eruption upon the ends of the fingers and toes. She was then seen by Dr. Dew, who described the eruption to me as consisting at that time of minute vesicles confined principally to the ends of the fingers and toes. He prescribed an ointment of one part of citrine and four parts of oxide of zinc ointment to be applied four or five times a day, and to avoid rubbing the parts as much as possible, which treatment she followed for three days without deriving much relief from the smarting and burning, when I then saw her. The eruption had extended to the backs of the hands and wrists, also to the feet and ankles; it was composed of vesicles grouped together, and on the feet and toes blebs were formed from one-fourth to one-half of an inch in diameter; she has always enjoyed excellent health, her mother, who was present, is a healthy-looking lady, whom I have known for the past five years, and neither she nor her daughter have ever had an eruption before. I immediately recognized the eruption as *Herpes Gestationis*, so clearly described by Dr. Bulkley in the American Journal of Obstetrics and Diseases of Children, as being an affection of the skin peculiar to pregnancy, dependent upon reflex uterine irritation. I advised the *liquor picis alkalinus*, as there recommended ʒij to a teacupful of water, to be applied frequently to the parts, and also gave gr. ij Quiniæ sulph. internally, three times a day. After using the medicine for a few days she began to get better, and improved rapidly, the vesicles dried up, leaving a slight discoloration, and by the 17th all traces of the eruption disappeared, the quinine was continued for several days longer. On the 28th of July she gave birth to a fine boy, after a natural labor, and is now doing well.—(*Archives of Dermatology.*)

CONCEPTION FORTY HOURS AFTER ABORTION.

Dr. J. Sparkman gives the following extraordinary case, in the Charleston *Medical Journal.* The patient had suffered from an abortion:—

My visit was about four hours after the accident, and there being no urgent or positive symptoms for interference, I simply prescribed quietness and rest. The husband requested me to return the next day and see her, as he had an appointment to leave home indefinitely, and did not wish to do so if her condition should forbid. On the next afternoon, about twenty-seven hours after the abortion, I found Mrs. L. on a lounge, having suffered no pains or inconvenience since my previous visit. Her reply to my inquiry as to her health was: "I am quite well." I asked if there had been too much or too little *show.* She answered: "I have been perfectly *dry* since this morning, and never felt better in my life. I have eaten a good dinner." I left, with instructions to be careful, and to notify me if anything should go wrong. Her husband left at six o'clock the next morning, and was absent twenty-two days. About a week after his return home, one of their children required my services during the night, and I was detained all night. The next morning Mrs. L. was suffering too much to appear at breakfast. She sought my advice, and frankly told me that she had suffered terribly from sickness and nausea for about *three weeks*, and that she feared pregnancy, as her breasts were quick, and evidently swollen

or fuller. I stated that her husband had been at home only one week; that he had left her but two days after her miscarriage; that the nausea had commenced *during his absence*, and that, if it resulted from pregnancy, there might have been a double conception, when only one fœtus was expelled, as twins were not always born together. She looked confused, and asked me "how long after a miscarriage before a woman could again get in a family-way?" Avoiding a direct answer, I inquired if she had been unwell at any time since her accident. She replied no, and then confessed that the last night her husband was with her, before his visit to Charleston, *feeling quite well*, she had submitted twice to his advances. This statement induced me to make a note of all the facts, and I watched the result anxiously. Subsequently the husband confirmed her story, and excused himself with an honest declaration, as I believe, that in view of his proposed absence she had invited or provoked his desires, by affectionate caresses, more amorous than usual.

The case progressed naturally, and she was confined two hundred and seventy-eight days from the date of my visit in October, after her abortion. And from due consideration of all the facts, I have no doubt that conception took place from the acknowledged coition within forty hours after said miscarriage. The infant was fully developed, and weighed ten pounds twelve hours after birth.

Transactions of the State Medical Society of Arkansas, 1875-6.—These transactions are creditable to the profession of Arkansas, and will be read with interest by the profession everywhere. They embrace twenty-four reports, necessarily short, as the volume consists of less than one hundred pages, but pointed, substantial, and instructive.

Dr. R. G. Jennings has very full health reports of Little Rock for 1874 and 1875; and they are followed by a case of "Extra-Uterine Pregnancy of over thirty years' standing," reported by Dr. W. H. Fannin, of Oak Lodge, Indian Territory. The subject was a coloured women aged sixty, who was married at twenty-five, and a few years after her marriage found a tumor to the left of the mons veneris as large as an egg, which steadily increased in size till it reached the spleen, with as steady loss of health. A physician was consulted, who advised against any attempt to remove the tumor. During all this time she menstruated regularly. In 1866 a fetid discharge from the vagina commenced, and has continued till the present time. Last August, whilst on the "night-glass," she felt some solid body pass from the vagina, and on examination found it to be a bone. Introducing her finger, she extracted, in the course of a week, twenty-five or thirty bones. On introducing his finger, Dr. Fannin found the vagina filled with a solid mass, "in which could be distinctly felt and easily moved many spicula of bone, one of which, an inch long, seemed nearly detached. An examination was made of the abdomen, the wall of which was thin. The uterus could be recognized in its normal position, somewhat larger than usual, sensitive when grasped and moved, but not painful. From the left of the lower part of the fundus, extending upward and backward to the spleen, can be seen and felt the outlines of a detached skeleton of a fetus, a section of the cranium being the most prominent; it is evidently separated from the rest of the skeleton, and can be moved under the abdominal wall in any direction for a short distance." The patient complains little, except of the offensive vaginal discharge. Dr. Fannin saw her in December last and removed a fragment of cranial bone.—*American Practitioner.*

Death from Chloroform during Labor.—The *Lyons Médicale* of April 9th records the death of a woman twenty-five years of age. The woman was in labor, and there being a shoulder-presentation, in order to perform version, chloroform was administered, under the sole direction of the sister in charge. The patient did not rally after the operation, and death occurred in ten minutes. The most singular feature of the case is, that neither the *chef-de-service* nor the *interne* on duty was summoned to see the woman till she was dead.

Contributions to the Determination of the Diminution of the Uterus after Delivery.—Dr. Serdukoff contributes an elaborate article (*Edin. Med. Jour.*) on this subject, based on measurements carefully made by himself on 150 women. The mode of measurement will doubtless be objected to by some, and it is certainly open to criticism, as being inherently somewhat deficient in exactness. Dr. Serdukoff relies on external measurements, preferring these, for various reasons, to internal ones. He concludes from his investigations that involution of the uterus is not complete until the lapse of from four to six weeks. The author's conclusions are as follows :—

(1) Involution of the uterus goes on more rapidly during the first few days of the puerperal period than it subsequently does.

(2) Involution of the uterus of healthy women goes on rapidly and with regularity.

(3) Involution, where the uterus is the subject of diseases, such as metritis, endometritis, or parametritis, goes on more slowly, and this varies with the amount of disease.

(4) The permanent contraction which takes place during the first few hours after delivery is a common occurrence. When it passes off, an increase in size begins to take place.

(5) In women delivered at the full time, involution goes on more quickly and regularly than in those prematurely confined.

(6) Length of labour retards involution.

(7) In adult primiparæ involution of the uterus goes on very regularly, but more slowly than in young primiparæ. In aged multiparæ involution does not go on so well.

(8) In women who suckle their children, involution during the first four days does not go on so quickly as in those who do not nurse. But subsequently the involution is quicker, though less regular.

(9) Afterpains are not necessary to a favourable involution; in fact, we are as well without them.

(10) In order to determine the involution of the uterus, its breadth only should be measured.

(11) Involution of the uterus goes on proportionally in length as well as in breadth.

(12) Super-involution and sub-involution occur as distinct uncomplicated pathological conditions.—*Brit. and For. Medico-Chir. Rev.*

Medical Jurisprudence.

THE EXAMINATION AND COMMITMENT OF THE INSANE.*

BY A. E. MACDONALD, M.D.,

Medical Superintendent, New York City Asylum for the Insane.

(*Concluded.*)

We will suppose now that you have finished your conversation, have ascertained as much as you desire from third parties, and are ready to see the patient himself. The question will arise, in what capacity, or pretended capacity, are you to visit him? Often, perhaps I might say ordinarily, the friends have a great objection to your entering in your proper character as a physician; they are so afraid of alarming or offending the patient, and they will suggest and urge the adoption of all manner of disguises and false pretences. The patient has been raving about his immense wealth and gigantic speculations, and you are a broker come to negotiate with him, or he is a king, so you must be an ambassador from a friendly power. They will want you to personate a tailor, come to measure him for a suit of clothes, or a milkman come to solicit his custom, and they will be quite astonished if you show any wounded dignity, or decline to join in these *tableaux vivants*. Now, as a general rule, admitting of but very few exceptions, I should strongly advise you to be no party to any such nonsense. Insist upon seeing your patient, as you would see a patient suffering from any other disease, in your own character as a physician, come to examine and to help him. I have seen too many patients tricked into an interview with two strangers, invited to drive in a carrage, to sail up the river, or to visit a public institution, and only realizing their position when the key was turned upon them, not to warn you earnestly against the evil and the folly of such deceit. Apart from the humiliation of assuming such disguises, you place yourself at a disadvantage, as you have no excuse for asking the very questions which you most wished to have answered, and unless you are a clever actor you are more than likely to be discovered by him whom you seek to deceive. I remember to have been foolish enough to per-

mit myself to be introduced to a patient, as a clergyman who had come to dine with him. He nearly upset me on the spot, by asking me to say grace, and, although I managed to get through that, he soon involved me in a doctrinal discussion, that exposed my imposture in short order. Since that time, I have seen my patients as a physician, or not at all, and I think it will be to your comfort to make this your rule. I can imagine cases where a little deceit might not only be justifiable but commendable. If, for instance, you go to visit a patient, and find that he has provided himself with a carving knife, and sworn to kill any doctor who comes near him, I think, I don't like to advise you strongly but I really think that it would perhaps be justifiable, under the circumstances, if you didn't let him know that you were a doctor. As a rule then, have yourself introduced as a physician, otherwise you will find it difficult to turn the discourse upon that topic with which you are most concerned, the question of the patient's health.

It may appear to you to be rather a superfluous precaution, but I advise you to make sure of being able at once to recognize your patient from those who may surround him, by learning before you enter the room some particulars as to his dress or appearance. It is not a little awkward and embarrassing to address yourself to a bystander, under the impression that he is the patient, but it is a mistake that has happened, and might happen again. While the introduction is being made, a hasty glance at the patient and his room, will often tell you much. His dress and the arrangement of the furniture and accessories, may reveal the disorder of his mind. From his countenance too, much may be learned, not so much, of course, as if you had known him in his ordinary condition, and could thus bring comparison to your aid. But nevertheless, the physiognomy is a valuable guide, and you will look to it for evidence of depression, excitement, cunning or rage,

Entering into conversation with your patient, you will endeavor to elicit from him evidence of the existence of insanity. You will remember what I have said to you in a former lecture about insanity, in any given individual, consisting in a departure from the normal condition of that individual, and not in any difference between himself and other individuals, or between him and any fixed standard. Hence, in your examination, you must compare him with his former self, taking into account his birth and breeding, the degree of his education, his occupation, habits and the like. What may be full proof of insanity in one, will be no proof at all in another. Say that you are looking for loss of memory, inability to repeat the multiplication table may reveal it in one, but another may never have learned it. So with loss of affection, loss of temper, loss of religious feeling, loss of anything else, make sure that there has been loss, not original absence. Remembering, also, what I have described as the characteristics of the two principal forms of insanity, you will expect the departure from the normal standard, in the maniac to be in the direction of exaltation, in the melancholic, in the opposite direction, towards depression. So you will select the topics of your conversation in either case, and having selected them, you will try to bring out delusions. I do not wish to be understood to imply that the presence of delusion is essential to the presence of insanity. A man may certainly be insane without holding any delusion, or at least any that becomes patent, under the most skilful and close observation and examination. I do think, though, that the want of evidence of delusion is more often due to our inability to elicit it, or the patient's cunning in concealing it, than to its absolute non-existence. Again delusions may be readily shown at one period in the progress of a case, and absent to all appearance at another. But a delusion is a very comfortable thing to get hold of when you sign a legal document, which may have to be defended in court, for judges and lawyers still cling to the idea, that there can be no insanity without delusion, and it may trouble you to convince them otherwise. Remembering what I have already said to you about delusions, that they are always connected in some direct relation with the person entertaining them, you will see that you will be unlikely to detect them by conversing on general and desultory matters. You must bring the subjects home to the patient himself, talk about his health, his business

affairs, his enjoyments, his family. Generally you will have learned something from your preliminary conversation with his relatives or friends, which will suggest the topics upon which you are likely to catch him. If you have not, you must be prepared to go over the whole ground, until you find his weak point. And here you will find the benefit of system. You might converse an entire day with an unquestionably insane man, going hap-hazard from topic to topic without causing him to reveal himself. The only proper and successful way is to have a regular order of inquiry arranged in your mind, and go from one subject to another methodically, until you hit upon the right one. I do not believe in monomania, as it is called, insanity in which there is a single false belief; but certain it is that we occasionally find patients whose delusions are confined in a very limited circle, or whose delusions, varied and numerous enough, escape detection until one false belief, the key-note of the whole, is touched upon. I remember, not long since, a patient coming to the asylum, who was to all appearance as well conducted and as sane as any of us. He gained the ear of one of the commissioners while coming up upon the boat, and told that gentleman so plausible and connected a story of wrong and injustice, and conspiracy, that he accompanied him to the asylum, fully convinced that a mistake had been made. As it happened I had seen the patient before, had, in fact, appeared before the Commission in Lunacy, which appointed a guardian over him and his property, and so, when he had repeated his story, more than ever convincing the Commissioner, I simply said to him, "but this will all be corrected when you are elected President, will it not?" And thereupon he launched into a string of extravagances, which very soon changed the mind of his would-be advocate.

Make sure, also, that what are at first glance patent delusions, are so in reality. Truth is stranger than fiction, and a patient may be merely stating a fact, or recalling an event, when he makes a statement that would appear incredible. Especially is this the case in regard to family scandals, and therefore, when a patient makes an assertion regarding one of his relatives, and that relative or others characterizes it as a delusion, do not be too ready to believe them without further evidence. I remember a patient coming to the asylum in a condition of confirmed melancholia, with delusions of persecution and injury. Gradually his mind cleared, he lost his delusions one by one, regained his physical health, and was apparently quite himself again, save that he told a story of some unknown enemies entering the house in which he lived, and poisoning some food that was placed in the cellar. This seemed such an unlikely thing, and was so much of a pattern with the delusions that he had held, and which had left him, that we looked upon it as a manifest delusion, and waited for it to disappear also, and were not a little surprised when assured by other inmates of the house that the story was substantially correct.

So I say to you again, don't be too ready to accept improbabilities as of necessity delusions, and do not accept probabilities as delusions, merely because relatives who are affected by them tell you that they are such.

If all cases of insanity were as marked as the typical ones which I have described to you, your duty would be an easy one. But they are not, and you will find your difficulty in cases which more nearly approach the border-line of sanity. One thing in your favor, such cases do not have the pressing need of immediate restraint, which attend the more decided and acute; you will, therefore, have time for more extended examination and for repeated visits, if need be. This you must always insist upon, despite the objection and importunity of relatives. In England the physician is required to give, in his certificate, only those indications of insanity which he has observed at a single visit. In this country it is not so, and repeated examinations are permissible. Never allow yourself to be bullied or coaxed into signing a certificate unless you are positive that the patient is insane. It is no mere matter of form, but a very serious undertaking. Not only may you be condemning a man to underserved confinement, but you may be exposing yourself to serious punishment and loss of reputation. It is not very long since, a case occurred in this city, which illustrates this danger. It was before the change in the law, which now renders it necessary for the physi-

cian, making oath to a patient's insanity, to give the reasons for his belief. In this State then, as in other States now, he had only to testify to the fact, not to the reasons. A man was sent to the asylum on Blackwell's Island with two certificates, in due form, setting forth his insanity, and signed by two reputable physicians. The Resident Physician, Dr. Parsons, soon found that he was not insane, and so discharged him. Thereupon he commenced suit against the two physicians, and it was shown upon the trial that his wife and daughter had invented the story of his insanity, because he objected to the marriage of the latter. One physician had been foolish enough to take the assurance of the other, and the other had been foolish enough to take the assurance of the wife and daughter; one had only seen the man once, and from a distance. Both were compelled to pay the damages. So you see that it is not always safe to trust too implicitly to the relatives of a person alleged to be insane, and you will find in this and similar instances, a warning to rely upon your own judgment, not upon the judgment, or perhaps the self-interest of others.

When you have fully settled in your own mind that the patient is insane, the next step toward his commitment is the preparation of the necessary certificate. This is not always an easy matter; one may very often arrive at a conclusion upon a subject almost insensibly. The conclusion may be perfectly correct and unquestionable, but it will puzzle him to recall to himself the process of reasoning by which he has reached it, much more to make it plain to others. And yet this latter, is just what, in this instance he is required to do. I may tell you for your comfort, that of nearly six hundred patients, admitted to the institution under my charge, since the passage of the new law, but a very few have brought certificates that are perfectly correct and satisfactory. So far as I have heard, the same is true of other institutions in the State, and a recent English writer, speaking of his own land, says: "Scarcely a single certificate is ever sent in from a medical man, that has not to go back to him, for the correction of some error or insertion of something omitted." The points in which, as I have observed, certificates usually fail, are that they are altogether insufficient or else too diffuse, that many things are stated which are irrelevant, that some things are stated as reasons, which are not necessarily reasons, and could only become so in the light of other facts which are not given; in short, that the writer of the certificate forgets, that it is not a mere memorandum for his own information, but a document for the examination of those who have never seen the patient.

You will remember that in the form of the certificate, which I read to you, the introductory words which precede the statement of the reasons, are these: "I further certify that I have formed this opinion upon the following grounds," and in the margin is the direction: "Here insert facts upon which opinion rests." In the space provided, I should first give the physicial evidences which mark the departure from health. Remember, that insanity is a physical disease, and as such, must exhibit physical symptoms. You may then state what departure there has been from the patient's usual condition, in his habits, or his behavior, or conversation, in short in his general manner of conducting himself, and take care that you state, that it *is* a departure. Many certificates err in this respect. A physician finds a man beating his wife, or a woman using filthy and obscene language, and he simply states these facts. Now these are no proofs of insanity, *per se*, because many men of the lower class beat their wives, and many women of a depraved class use improper language, without being insane. They were proofs to him, because he knew from previous acquaintance with the patients, or saw by the character of their relatives and their surroundings, that this was not in accordance with their former custom. This constituted them proofs to him, and this he must state in order to render them proofs to others. He should also state where he obtains these proofs; does he know them himself, or have they been furnished him by others? So also with delusions, show plainly, in the certificate, that they *are* delusions. If a man says that he has no head, or that he has an elephant in his stomach, these are self-evident delusions, and it is enough to state them, but the larger number of delusions might possibly be true. They only

become delusions in your sight, because you know, or are assured, that they are untrue, and you must state this knowledge or assurance, and the source of the latter, in your certificate, if you expect to convince those to whom it is addressed.

I have told you to observe a patient's dress and surroundings in search of evidence of insanity. If you find a patient, ordinarily precise in his dress, neglectful and slovenly, or decked with tawdry adornments, it will constitute a certain amount of evidence, provided you state his former habit. But there are other things which are no proof at all. I frequently receive certificates, in which the physicians signing them, state as a reason, "the patient is confined by a strait jacket," or, "is tied down in bed." Now what possible proof of insanity is this, except by the most indirect implication? The patient did not put himself in the strait jacket, or tie himself down in bed. If he was violent, or destructive, state the fact, the means which others had recourse to are no proof. If they were, you might quote your being summoned as proof conclusive. Another mistake often made, is in merely writing the form of the disease, in the space left for reasons. To say that a patient is insane, because he has mania or melancholia or dementia, is equivalent to saying that he is insane, which is no reason at all. I have spoken of the error of not making the certificate full enough; avoid also the opposite error of making it too full. Do not be tempted to put in anything you are not perfectly certain of, just to round it off nicely. Prepare and sign every certificate, as if you had to support and defend it in a court of law; you can not tell how soon you may be called upon to do so. For in the matter of insanity, as in other branches of medicine, suits for malpractice are not uncommon. It is not very plain to be seen why a doctor, who conscientiously, and to the extent of his skill and knowledge, endeavors to do what is proper to be done in a case entrusted to him, and makes a mistake, as all are apt at some time to do, should be held to a stricter account than those in other professions and other walks of life. We never hear of a lawyer's being sued for malpractice because he has wrongly advised a client, although in every case where there is a plaintiff and a defendant, one or the other must of necessity have received mistaken legal advice. Nor is it recorded that a clergyman has ever been sued for damages, because he failed to save the soul of a member of his flock, who had paid for a pew with that object. It is to our profession alone that the public look for infallibility, and the implied compliment must reconcile us to the penalties of their and our mistakes.

I shall pass from this subject, and conclude my lecture, by reading to you one or two faulty certificates, and pointing out wherein their faults lie.

"I further certify that I have formed this opinion upon the following grounds: He says that his wife is dead, and that he has lost all his property. He is untidy in his habits, and careless in his dress, neglects his family." Now there is nothing in this description that would not apply to many men whose sanity is never questioned. To make this certificate satisfactory, it should read somewhat as follows.

"He believes that his wife is dead, whereas I know that she is alive and well, and thinks that he has lost all his property, when his partner assures me that their affairs are in a prosperous condition. He is untidy in his habits, careless in dress, neglectful of his family, when formerly, as I am aware from personal observation, and the statements of his servants, he was very scrupulous in habits and dress, and of a very affectionate disposition towards his family."

Again. "She swears and uses obscene language continually. Says her husband is unfaithful. Has been drinking hard lately. Claims that a relative endeavored to kill her last night."

You might find a woman of whom all this might be said without her being insane. Written as follows, these reasons assume a different complexion.

"Although all her life a chaste and modest woman, and not in the habit of touching liquor, she has lately and suddenly become intemperate, uses obscene language and acts immodestly. She states that her husband is unfaithful, but can give no reason for thinking so, and claims that an attempt was last night made to kill her by a relative, who is in reality in Europe."

To conclude with a word of advice, which you may or may not take, as you see fit; inasmuch as the commitment of a patient to an insane asylum is a matter involving no little trouble at the time, and possibly no little annoyance in the future, I should strongly advise you to make it an invariable rule in such cases to exercise the utmost discretion, to hear all that is said, but say as little as possible yourself, and always to keep a memorandum of the case and its chief facts, your advice, prescription, &c., and you will then be able to answer any possible inquiry, whether judicial or otherwise.—*Am. Journal of Insanity.*

Medical Education.—The April number of the St. Louis *Medical and Surgical Journal* contains an earnest appeal, by Dr. William S. Edgar, the senior editor, to the Missouri State Medical Association, for establishing a State Board of Examiners, by whom all who shall hereafter desire to practise medicine or surgery in Missouri must be examined. In the course of this appeal, Dr. Edgar asserts that the way into the medical profession has been made broad and easy, and the enticements so alluring, neither price nor brains being longer required; that with the unnecessary multiplication of schools comes sharp competition, with its disgraceful accompaniments, and that the show of a class must be made, even if all its members are beneficiaries and without preparation or qualification for the profession; that schools are established to give prominence to men and advertise them, not men selected to fill the chairs and give reputation to the school; and that the title M.D. is just as good, obtained by an ignoramus from an inferior college, so far as the public are concerned, as that obtained by a competent man from the best institution; and that personally he has no objection to low fees for medical teaching, or no fees, if a fair standard of preparatory education were required of the matriculant.

Her Majesty has conferred the Companionship of the order of the Bath, Civil Division, on Mr. John Simon, medical officer to the Privy Council and the Local Government Board.

Translations.

Extirpation of a Myoma from the inner Surface of the Bladder—Recovery.

This case, interesting and instructive, both on account of the nature of the tumor, and the mode of operation, is recorded in Billroth's *Clinic.* An intelligent boy, previously healthy, suffered during the last ten months from disease of the bladder. He had pain in making water, both in the glans penis, and in the abdomen, and after a time difficulty of micturition. In Glimberg he was examined with a sound, and a diagnosis of stone in the bladder made out. On July 3rd, 1874, he was brought into the clinic. After several examinations with a sound, and also per rectum and through the walls of the abdomen, no stone could be found, but the following condition was made out. In the region of the bladder, a little to the left of the median line, a hard tumor about the size of the fist could be felt through the abdominal walls, which was very movable, and appeared to be attached to the bladder. The same body could be felt through the rectum. The instrument glided over a rough, uneven surface, which, on one occasion, gave a peculiar click as though a stone was struck. Through combined manipulation with the sound, and through the rectum, it was shown that the tumor was attached to the posterior wall of the bladder and extended into its cavity, and that the consistence was that of a fibroid about the size of a man's fist. The nature of its attachment could not be discovered. There was some cystitis.

After these examinations, Professor Billroth made the diagnosis of a tumor of the bladder, probably a sarcoma or a fibro-sarcoma, and decided on a mode of operation which was carried out on the 15th of June. When the patient was put under chloroform the ordinary lateral section into the bladder was made, and the finger was introduced, when the diagnosis was confirmed. A firm tumor, about the size of a man's fist, was found to be attached to the posterior wall of the bladder. The section above the pubes was then made as in the high operation for stone. Both recti were divided at their base by means of a transverse section,

and the opening into the bladder was also enlarged by a transverse section. The tumor was then quickly torn from its attachment and removed. The pedicle, which was found attached to the muscular coat, was then removed, leaving the fibrous and peritonial coats untouched. Both wounds were allowed to remain open, and a drainage tube was drawn through the bladder in order to draw off the urine and prevent it from oozing through the wounds. For this object it was quite successful.

On July 18th, the boy left the hospital cured, the wounds having healed up very rapidly. The tumor was found to be a myoma, and to be made up almost entirely of unstriped muscular fibres. Nowhere in medical literature is any account of such a tumor of the bladder mentioned. — (*Die Medicinische-chirurgische Rundschau.*

Billroth on Transfusion.

Billroth, who is not in favor of transfusion, has published several cases in which it has not been followed by any real benefit. He is decidedly opposed to its employment in patients suffering from chronic diseases, and even in acute anæmia, in which, according to some, it restores life almost miraculously, he has seldom seen it of any use. He has reported two cases of transfusion of his own, the second being of such interest as to be given in full.

G. R., female cook, aet. 29, was admitted Sept. 23rd, 1875, on account of an enormous osteo-chondroma which grew from the left side of the pelvis. The disease began two years ago, and at present a hard resisting tumor about the size of a man's head is attached to the horizontal ramus of the pubes, and so fills the pelvis as to cause extreme difficulty in emptying the bladder and bowels. It was decided to perform resection of the horizontal ramus of the pubes, and in this way to entirely remove the disease. Pus, having a bad odour, was being continually discharged from the vagina, a circumstance which led to the operation, as without it there was no hope.

On November 22nd, the patient was put under chloroform, and after compression of the abdominal aorta, that portion of the tumor outside the pelvis was removed, then the horizontal and part of the descending rami of the pubes were also removed. It was found, however, that the base of the tumor extended along the inner side of the pelvis, but after a good deal of trouble the whole of it was removed, and the cavity was tamponned. In spite of the compression on the aorta, the patient had lost a good deal of blood. During the operation the four extremities were bound with elastic bandages, notwithstanding which, however, the patient passed immediately into a state of collapse. Her head was then lowered to such an extent as to almost touch the floor, when she revived at once, although before her pulse could not be felt, and she had ceased breathing. The patient was kept in this position for about an hour, when, although she had somewhat recovered she was still so weak from the absolute loss of blood that it was not possible for her to exist until new blood was made. Billroth then determined, almost against his will, to try transfusion. The brachial artery was then opened and three ounces of defibrinated blood was injected into it. During the preparations the patient felt some pain and spoke a few words. During the operation the respiration and heart's action ceased. The patient was dead.

The post mortem revealed the left side of the heart empty while the right side was filled with blood, as also were the lungs. Billroth's impression was that the transfusion was the immediate cause of death.—*Die Medicinische-Chirurgische Rundschau.*

Chloral Injections in Convulsions of Infants.

At a meeting of the Society of Medicine, of Paris, held on the 26th February last, M. Polaillon read a communication on the use of chloral injections in the convulsions of infants. The results obtained by him in eclamptic convulsions by the aid of chloral, led him to this new application. In two cases in which syrup of ether and the ordinary remedies had failed, M. Polaillon administered chloral gr.0.20 in 20 grammes of water as an injection. Calm sleep and cessation of convulsions followed. Twenty-four hours after the first injection, a second was administered, and the cure was complete. —*Paris Mèdical.*

Method of Avoiding the Pain following the Use of the Actual Cautery.

From the columns of the *Gaz. Med. Ital.* we copy the following remarks of Dr. Levis in the *Giornale di Med.* (Milan) :—

I apply pure carbolic acid to the parts to be cauterized, which I then cover with some light compress; then, without letting much time elapse, that is before the anæsthetic action passes off, I apply the cautery. One may use indifferently liquid acid or crystallized, the first being applied with a pencil, the other melting with the warmth spreads itself on the part almost of its own accord.

If pain comes on after the extensive and deep use of the cautery, it will be well to renew the application of the carbolic acid; in my practice, however, I never found it necessary.

Now that the very great importance of the use of carbolic acid, as a local anæsthetic, has become familiar to me, I will employ, with greater frequency than formerly, the actual cautery in surgical operations, particularly in neuralgic pains and in painful chronic joint diseases, and I have always succeeded in obviating the pain in a satisfactory manner.

I hope the beneficial use of this agent may become well known, and may cause to be employed more frequently in practice the powerful therapeutic remedy of the actual cautery, which appeared for a long time to be abandoned by surgery.

Local Application of Silicate of Potassa in Erysipelas.

Prof. Alvarenga, of Lisbon, speaks of the silicate of potassa as the drug, which, after several years' trial, has never failed him in the cure of erysipelas. It is applied in liquid form. Its curative agency seems to result from its power of reducing the temperature. Even when applied to the healthy skin it reduces the temperature. In a series of one hundred and forty-eight physiological experiments the reduction varied from °5.1 to °0.1 (centigrade). In some few exceptional cases there was no dimunition of temperature, and in some it first rose and then fell.

Of the pathological experiments the writer gives the results of forty-eight, in which the temperature was taken twice a day, and no other treatment was used. Cures resulted in five, six, and seven days. Further on the average period of cure is given as four days. He makes a comparison of the curability of erysipelas by other drugs as to time, complications and cost, and in all the silicate takes the palm.

He says that in Brazil he has used it not only in erysipelas but in lymphangitis following elephantiasis; in acute cases it was "triumphant," and even in chronic cases the swellings left by previous attacks diminished notably under its use.—*Gaz. Med. Ital.*

Treatment of Coxalgia at Berck-sur-mer.

In the report of a meeting of the Society of Surgery of Paris published in the *Paris Médical*, May 4th, M. Cazin and M. Perrochaud, of the hospital of Berck-sur-mer, give the results of their experience in the treatment of coxalgia without operation. From August 1, 1872, to March 9, 1876, 212 were treated, of which eighty had gone on to suppuration. The average duration of treatment was 555 days. The average age was 9·36 years. The majority of cases were seven years of age. Of forty-four boys, with suppurating coxalgia, fifty-five per cent. were cured, and ten died. Of thirty-four girls twelve were cured, four improved, eight unimproved, and three died. The causes of death were, albuminuria, suppuration, tuberculosis, or pyœmia. When the general condition of the patients was relatively good, a cure was effected almost constantly in six months. When there were multiple fistulæ, with good general health, sixty per cent. were cured. In those who had reached the last stage recovery was very rare. Coxalgia among the poor did better than those among the rich under maritime treatment. Almost all those cured walked without crutches. There were only two relapses. To change of air, the purity of the sea air, the respiration of alkaline iodides, the stimulation of the digestive organs, much of the benefit received was attributed. The local treatment was either a silicated bandage reaching to the axilla, opening at the side so as to permit of daily dressings and baths, or an apparatus for keeping up extension.

On the Effect of Faradization in Acute Rheumatism. By Dr. Abromowski, Berlin.

Recently Von Drossdoff has made public his observations in Acute Articular Rheumatism, which go to show (1) that the pain and tenderness are removed by the application of electricity, and in some cases it does not return; (2) that the disease under its influence is much shorter in duration; (3) that the tendency to recurrence is not lessened, but that these recurrences are shorter in duration.

In order to prove the truth of the statements, Abromowski made a number of trials in Frerichs Clinic. In conducting these experiments he differed from Dr. Von Drossdoff only in using a small brush instead of using a small sponge as one of the electrodes. The first statement of Drossdoff, Abromowski could not verify, even in the histories of the most favourable cases. He applied the electrical to each patient from ten to fifteen minutes daily, placing one electrode on the sternum and applying the other to the affected joint. In almost every case after the first application a diminution of the pain of several hours' duration ensued. Frequently patients could freely move the arms and legs immediately after the application. Lasting benefits usually ensued after several applications. The fever rose and fell with the severity of the local symptoms. A temperature over 40° cent. was never observed in any of the cases. The duration of treatment was ten days.—*Die Medicinische-Chirurgische Rundschau.*

Tetanus Cured by Mechanical Means.

Dr. Calastre (*Gazette Medic. Lombarda*, No. 27), relates that a patient convalescing from several attacks of hæmorrhage of the skin and mucous membranes, was attacked with partial tetanus, probably of traumatic origin, following a wound in the sole of the right foot. The tetanic symptoms were characterized by rigidity of the muscles of the cervical region and of those of mastication. Quinine and chloral were given with indifferent results. The author then, considering that the tetanus was localised in the above-named muscles so that the patient could only be imperfectly nourished, overcame the stiffness of the neck by forcible movements of flexion, rotation and extension, as far as voluntary movements were possible. He then separated the jaws by degrees, and from day to day the opening enlarged, and the patient could attempt to eat solid food. This treatment lasted about a month (August), and in the autumn the cure was complete.—*Bulletin de Thèrapeutique—Paris Médical.*

On the Treatment of Rickets with Bitch's Milk.

In Montbrunn-les-Bains in the Dauphine, which is known on account of its sulphur springs, the women allow their children to nurse at the breast until they are two or three years old, in order that the mothers may not again become pregnant. When the child dies before this time they take a young puppy and allow it to drink from the breast for some time. This explains the great number of dogs to be found there, particularly of the terrier species. Dr. Bernard remarked that nearly all the dogs which were nourished in this way were in the highest degree ricketty, whereas, the species itself was strong and healthy.

Rickets follows the same course in dogs as in man, with the exception that in the dog the deformity is never compensated for, but where a ricketty dog is allowed to suckle a bitch it soon loses its bone disease. Bernard allowed a ricketty child of twenty months to be nourished by dogs' milk; all symptoms of rickets disappeared. These observations were confirmed in 1874 by six successful cases.—*Die Medicinische-Chirurgische Rundschau.*

Treatment of Chronic Torticollis.—M. Gubler, in a communication to the Society of Therapeutics, takes a different view to that usually held as to the nature of chronic torticollis, and considers this disease, in the majority of cases, as the result, not of muscular spasm, but rather of a cervical arthritis situated principally in the lateral articulation of the cervical vertebræ. If the patient inclines the head towards one or other shoulder, it is by a voluntary action of his muscles for the purpose of immobilizing the diseased vertebral articulations. Frequently then,—and in this opinion M. M. Dally and Cadet de Gassicourt agree—we ought to treat the arthritis, and not the muscular affection which either does not exist, or else has not the importance generally attached to it.—*Paris Médical.*

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Journal of Medical Science,

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TO CORRESPONDENTS.— *We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, JULY, 1876.

THE MEDICAL COUNCIL OF ONTARIO.

WE devote a large space to the proceedings of this body, where our readers will see the action taken in regard to the irregularities complained of at the last fall and spring examinations; and although nothing like a full investigation was had, owing to the absence of several important witnesses, yet enough was elicited to convince the Council that if they wish to regain or secure the respect of the public and the profession, they must take some means of preventing the recurrence of such things in the future; and, hence, notwithstanding the violent protestations of certain members and the whitewashing report of the Committee appointed to investigate the matter the Council were compelled, by the force of public opinion, to make such a change in the examiners for next year, as will, in all likelihood, secure that decorum and dignity which should be the distinguishing characteristics of a Medical Board. It is no use for interested parties to declare that the accounts given of the proceedings at the late examinations were grossly exaggerated. We had the misfortune to take part in both examinations, and we declare positively that the accounts *were not and could not* well be exaggerated. When the person to whom the chairman appealed for a certificate of character, says that two examiners were stupidly drunk, and two others pugnaciously so, and the very learned and discreet President of University College declares that the proceedings were "perfectly disgraceful," and threatened to close the doors of the University building against the Council examinations in future, we think our readers will agree with us in the strictures we have felt called upon to make, and will support our efforts to rid the Council and the profession of the disgrace resulting from such conduct.

It will be seen that on motion of Dr. Ross, thanking the University authorities for the use of their rooms, the Council virtually admit the whole matter, and apologize in the most humble manner for the irregularities complained of, resolving that they "express their regret for the occurrences during the recent examinations of this Council, and that this Council will use their utmost exertions to prevent the recurrence of the same in the future."

We are, therefore, satisfied that a majority of the Council, while allowing themselves to be cajoled into an effort to whitewash their colleagues, are heartily ashamed of the whole affair, and have given evidence of their desire to wipe out the stigma, by the thorough change they have made in their examiners for next year. We would remind the Council, however, that they are still on trial, and that it will require all the efforts of their friends, and a great deal more circumspection on their own part than they have hitherto manifested, to remove the ridicule and contempt with which they are still regarded by a large section of the profession throughout the country; but it is puerile for any member of the Council to think he can secure that support which is so much needed by any attempt at coercion, or withdrawal of advertising patronage, "because neither of the medical journals support the Council."

With all the peculiarities of the Medical Council, we confess we were surprised to hear men who make such a pretentious display of intellectual superiority and modern liberal opinions so far forget themselves.

We have different views of the mission of the press. Again, some members of the Council are continually asserting that the medical schools are trying to usurp the powers of the Council; but we would remind these gentlemen that they are indebted to the medical schools for their very existence as a Council; that the schools voluntarily gave up the very powers they are now accused of trying to take; that it

took many years of effort on the part of the schools to induce the Legislature to first call the Medical Council into being; and that the *profession* cares so little for the Council, that if it were not for the schools and the influence they exert on their old pupils throughout the country, the "Medical Parliament of Ontario" would soon be a veritable *cross-bones* Parliament, as it would be allowed to starve to death very shortly; and we venture to assure these gentlemen that if the medical schools of Ontario should unite in a crusade against the Medical Council, the "Medical Parliament of Ontario" would soon be like that of "Praise God Barebones."

We wish to call attention to the advertisement of the next meeting of the Dominion Medical Association, which takes place at Toronto, on August 2nd. We trust that a large attendance will assemble, and that the profession of Western Canada will muster as strongly as those of the Maritime Provinces did last year.

Communications.

To the Editor of the Canadian Journal of Medical Science.

CODE OF MEDICAL ETHICS.

Sir,—In a report of a meeting of a County Medical Society held not long since in some part of the Province of Ontario, I observed that it was resolved that the Society adopt the code of ethics of the American Medical Association; possibly the printer has done the County Medical Association an injustice in substituting American for Canadian Medical Association. However that may be, I would respectfully intimate to the members of the said Society that I learn, on undoubted authority, that there is in the Dominion a Canadian Medical Association, and that this Association adopted a code of ethics six years ago. I also learn that the next annual meeting of this Association will be held in Toronto on the 2nd of August next. I doubt not that the members of the aforesaid County Society will be welcome, unless, indeed, they unfurl the stars and stripes and declare themselves annexationists.—Yours, &c.,

M. D.

Book Notices.

Recto Urethral Fistula. By Edward J. Bermingham, M.D. New York, D. Appleton and Co.

Fifteenth Annual Report of the President of Harvard College, Cambridge, John Wilson and Son, 1876.

Proceedings of the State Medical Society, held at Ann Arbor, Michigan, May 10th, 11th, and 12th, 1876.

A *Report on Dermatology,* read before the Kentucky State Medical Society at its Annual Session, April 1876, by L. P. Yandell, jr., M.D., Indianapolis, 1876.

Statement of the Faculty of the Department of Medicine and Surgery in the University of Michigan regarding the action of the State Medical Society.

Specimen Fasciculus of a Catalogue of the National Medical Library under the Direction of the Surgeon General, United States Army. Washington, 1876.

National Medical Library. Valuable exchanges from the publication of the Surgeon-General's office will be furnished for any of the following desiderata, or a fair price will be paid for them. These periodicals are specially wanted at the present time in order to complete the Subject-Catalogue of the Library. Very few of these missing volumes can be procured through the ordinary channels of trade. It is only through the co-operation of physicians, and by contributions from their shelves, closets, and garrets, that their collection can be accomplished.

British America. British American Medical and Physical Journal. By Arch. Hall. New Series, Montreal. Want No. 10, Vol. vi. and Vol. vii. (1850-52.) *Canada Lancet.* By W. E. Bowman, Monthly, Montreal. Want Nos. 11. 13, and all subsequent of Vol. 1. (1863-65); and after Vol. 1. *Upper Canada Journal of Medical and Physical Science.* By S. J. Stratford, Toronto. Want No. 7, Vol. 1, (October, 1851); Nos. 2, 3, 5, Vol. 2, Nos. 10. 12, Vol. 3; and all subsequent.

Meetings of Medical Societies.

ONTARIO MEDICAL COUNCIL, ANNUAL MEETING.

The Ontario Medical Council met at Toronto in the County Council Chamber, on June 6th.

Present: Drs. Aikins, Bethune, Campbell, Daniel Clark, Holder, Ross, Allison, McLaughlin, Berryman, Bogart, Carson, Brouse, W. Clark, Cornell, Edwards, Henderson, Dewar, Grant, Logan, Lynn, Henwood, Hyde, Irwin, Lavell, Macdonald, Morden, Morrison, Muir, and Vernon. The minutes of last meeting having been read, and approved, Dr. Edwards, the retiring President, made a few remarks referring to the necessity of having a suitable building wherein to hold their meetings, and to the failure of the Executive Committee to secure aid from the Government for that object. He referred to the scandal in connection with the spring examinations, and advocated a full and searching investigation. He upheld the wisdom of appointing examiners from among the members of the Council, though it might be well to extend the election to members outside of the Council.

Dr. Daniel Clark was unanimously elected President of the Council, and thanked them for the honour in appropriate terms. Dr. Duncan Campbell was elected vice-President. The Standing Committees of last year were re-elected, the late President and Vice-President taking the positions of their successors.

Dr. Dewar presented the report of the Executive Committee. It stated that in July last public prosecutors had been nominated; that a deputation had waited upon the Government to ask for aid toward defraying the cost of the examinations, but the result was unsatisfactory. The Committee also pressed upon the Government the necessity of remuneration of medical witnesses. The Committee recommended that a new method should be instituted for prosecuting unlicensed practitioners, and that a new code of rules and regulations should be framed. The report was adopted after a short discussion.

Dr. Campbell presented the Report of the Board of Examiners for the August and Spring Examinations, stating that he wished the press who had circulated the scandal about the examiners at the last examination to know that it had not the slightest foundation.

Dr. Berryman stated that he wished to clear himself from any reflection that might be cast upon him owing to the clause in the report stating that the examination had been delayed owing to the lateness of the return of the papers from the representatives of Victoria College and Trinity College. He stated that owing to his having to examine in three subjects: Botany, Toxicology, and Sanitary Science, he found it impossible, without desecrating the Sabbath, to finish all three branches.

Dr. Grant moved, seconded by Dr. Macdonald, "That a Special Committee consisting of Drs. Brouse, Logan, Morrison, Bethune, Muir, Ross and Grant, be appointed to make a full and careful enquiry into the whole matter of the recent medical examination, and report to this Council, in order that the best interests of our profession may be guarded, and that the report be received and referred." Drs. Wm. Clarke, Dewar, Brouse, and Campbell spoke, urging a searching investigation.

Treasurer's Report.

Dr. Aikins submitted his statement, as follows:—

Receipts.

Balance on hand	$3,368 40
Taxes upon illegal practitioners	124 70
Dr. Pyne, Council Money	1,233 13
Matriculation Fees	698 74
September Examinations	930 00
April Examinations	2,820 00
Interest	67 51
Sundries	11 50
Total	$9253 98

Expenditure.

Expense of last meeting of the Council	$1071 04
Accounts pass'd by the Fin'ce Com'tee.	884 22
Other accounts	52 55
Returning Officer's fees	60 00
Prosecution of illegal practitioners	85 00
Registrar's Salary	600 00
Expense of October Examination	657 00
" " April "	730 25
Rebates of Rejected Students	272 00
Executive Committee	641 40
Postage	2 14
Balance on hand	4197 98
Total	$9253 98

The report was referred to the Finance Committee.

SECOND DAY.

The Council met in the morning, but adjourned to admit of the various Committees proceeding with their work.

In the afternoon Dr. Allison moved, seconded by Dr. Hyde, "That the Committee on Education be instructed not to recommend any member of the Council for Examiner, but that members of the profession outside the Council who have been selected by Medical Associations, or others whom the Committee believe to be capable of performing the duties, be recommended to the Council for appointment." Both mover and seconder referred to the general feeling of the profession being with them upon this point. After some discussion the motion was laid on the table, and the Council adjourned to allow the Committees to prepare their reports.

In the evening Dr. Cornell presented the report of the Printing Committee.

Some discussion ensued in Commitee of the Whole, on the clause referring to the loose manner in which several accounts had been incurred by members of Council having authorized advertisements and printing without the knowledge of the proper officials. Considerable discussion ensued as to the amount of advertising that should be done, and as to the papers in which advertisements should be inserted. Dr. Edwards argued that the medical journals should not be patronized, because they had not supported the Council, and stated that the profession in Western Ontario would not support the medical journals so long as they did not support the Council.

Dr. W. Clark and Dr. Lavell differed from Dr. Edwards on this point, and thought that the action of the Council and its members ought to be a legitimate subject of fair criticism in the medical journals. The report of the Printing Committee was adopted, with the amendment that the Registrar should be empowered to insert advertisements to the extent of three insertions in two newspapers, and further only by order of the President.

THIRD DAY.

The Finance Committee reported the accounts to be correct, and recommended that $50 additional be paid the Treasurer as remuneration for his services. They stated that the expenses of the meetings of the Executive Committee had amounted to $700, and recommend that the number of its members be reduced. The report was adopted.

In the afternoon session a deputation consisting of Dr. Walmsley and Boulby, from the Medical Association of the County of Waterloo, was introduced by Dr. W. Clark.

The object of the deputation, as stated by them, was to request the Council not to grant a license to a Mrs. Eby, to practise as a midwife, urging that it would be establishing a precedent. On motion of Dr. Dewar, the matter was referred to the Registration Committee.

REPORT ON THE ALLEGED SPRING EXAMINATION IRREGULARITIES.

To the President and members of the Council:—

Gentlemen,—In compliance with your specified request we have called various witnesses and made a full enquiry into the subject of the recent medical examinations, and beg to submit the following:—

1. The written examination was regular and satisfactory in every respect, except in the case of a German student, whose papers were passed in an irregular manner and contrary to the directions of the Council, although his standing was sufficiently high to enable him to qualify.

2. The chief irregularity was brought about in the oral examinations, owing to the unexpected absence (at the appointed time) of Drs. Bethune and Berryman, thus occasioning the delay complained of by the students. To obviate such in the future, we would urgently recommend to the Council that a change be made in the examiners, being fully of opinion that on so important an occasion the carrying out of the examinations should be attended with promptness and regularity.

3. In future the students presenting themfor examination should be provided with an ante-room, so as not to obstruct the proceedings of the examiners by outside irregularities, such as experienced during the recent examinations.

4. For the future your Committee would recommend that every possible care be taken to maintain the honour and dignity of the profession, that every degree of justice be accorded to those coming forward for examination, and that no intercourse between examiners and students, such as would indicate the points of examination, should take place.

5. The examinations as a whole were satisfactory. Still, while regretting exceedingly that any irregularities should have taken place, we are of opinion that the published accounts of such were considerably overdrawn.

6. In the performance of the duty assigned your Committee, every opportunity was afforded all concerned to give such evidence as would in any way clear up the point at issue, and we feel satisfied that for the future your honourable Council will have no occasion to consider such irregularities.

J. A. GRANT, M,D.,
Chairman of Committee.

Dr. Lavell then rose and said that as there was likely to be a discussion on the terms of the report, he would retire while it was going on.

Dr. Dewar said he would likewise retire.

Dr. Campbell thought that the terms of the report were not sufficiently explicit to explain away the charges which had been brought against certain members of the Examining Board. Certain charges had been widely published through the newspapers all over the country, and the community was looking for something being done by the Council to clear up these charges. He did not think the report submitted did so, the language employed was far too feeble.

It was then agreed to remit the discussion to a Committee consisting of the whole members of Council.

The President having retired along with the Registration Committee, Dr. Muir was voted to the chair *pro tem.*

Dr. Allison thought the report was incomplete, and did not define the true position of matters with regard to the irregularities referred to in it. He thought the report should state what these irregularities consisted of.

Dr. Brouse, as one of the special Committee, did not think it was right that members of Council should speak so disparagingly of the report now submitted. He and the other members had worked earnestly and conscientiously in getting at the true facts of the case, and this was not done without a considerable deal of hard work. In the course of their enquiries they had examined fifteen witnesses, and they were sure that previous to writing out that report they had the facts of the matter clearly before them. Dr Campbell had stated that the report was feebly expressed. He could not see that it was so. It had been found that the examinations had been carried on regularly up to a certain time; that latterly some irregularities had taken place. It would be seen from the report that because of these irregularities the Committee had recommended that the faulty examiners be not again appointed, or, as the words of the report express it "that a change be made in the examiners." He thought this was saying quite enough, and did not know what stronger language could have been employed.

Dr. Allison thought that notwithstanding what Dr. Brouse said, the nature of the alleged irregularities should have been explicitly stated in the report. In the reports and letters which had appeared in the newspapers certain of the examiners had been accused of irregularities, and the report stated that the parties who had been guilty of these irregularities were Drs. Berryman and Bethune. Now, it appeared that these gentlemen were charged with something which, for the reason that it was not denied, might be murder or robbery, or something equally as bad for aught that he knew. He thought, therefore, that Dr. Grant ought to "take the bull by the horns," and come out with the whole facts of the matter.

Dr. Campbell understood that the charge against the examiners, as appears from the papers, was drunkenness. He, as Chairman of the Board, most emphatically denied the charge. There was an irregularity on the part of Drs. Berryman and Bethune in not coming up to time, and for this he had rated them soundly; and speaking of this he would just say that, notwithstanding they were thus made to wait for four hours, the students behaved themselves

very creditably—indeed they were very forbearing—although at a later period they did misbehave themselves somewhat. With regard to the charge of intemperance, however, he gave it an unqualified denial. When Drs. Bethune and Berryman did come forward he did not notice that they were the worse of liquor, and he did not see where they could have got it during the day, for they did not leave the University till four o'clock next morning, and the only times they were absent from the examination rooms being during dinner and tea, when the Professor was present.

Dr. W. Clark thought that it would be better to adopt the report as read, for if they called for production of the evidence which formed the data of the report, much would come to light which they would not wish to be made public.

Dr. Bethune, Glanford, agreed with the previous speaker, as did also Dr. Ross, who was in favour of the report being adopted as a whole.

Dr. Berryman stood up, and wished to explain that the discussion of the report was not just, and that it ought to be expunged. He said that the reason he was absent was because of his child having got scalded on the day of the examination. He said if he had a friend present he hoped he would stand up and make a motion to that effect.

Dr. Brouse stated that he had been a friend to Dr. Berryman in the past, and had proposed him as a member of the Council, but with the evidence which he held in his hand bearing on the case he could not make any such motion. He hoped that Dr. Berryman would not push the matter any further and render it necessary for the evidence to be read to the Council.

The report was then adopted as read.

Dr. Allison then called attention to the motion made by him, and which had been seconded by Dr. Hyde, "That the Committee on Education be instructed not to recommend any members of the Council for examiners; but that members of the profession outside of the Council who have been selected by the Medical Associations, or others whom the Committee have reason to believe capable of performing the duties, be recommended to the Council for appointment." In explaining his reasons for making this motion, Dr. Allison hoped the members would not oppose it without due consideration.

Dr. Hyde also spoke in favour of the motion, and thought that the present monopoly system should be done away with.

Dr. W. Clark spoke at length on the subject, after which,—

Dr. McLaughlan moved, seconded by Dr. Lavell, "That the Council will always endeavour to avail themselves of the services of the most competent examiners selected from the registered practitioners of Ontario."

Drs. Dewar, Bethune, Glanford, Macdonald, Campbell, and Berryman also spoke on Dr. Allison's motion, and were not inclined to favour it.

Dr. Ross was inclined to favour the motion of Dr. Allison. The question was one of much importance. It was apparent from the matters which had come up that day for their consideration that there was something wrong with their examinations. He thought also that it was unfair that none of the examiners should be selected from outside of members of the Council.

As it was evident that the meeting could not close their argument on the question that night,

Dr. Brouse moved, seconded by Dr. Irwin "That the motion of Dr. Allison be laid on the table." Carried.

The Council then adjourned at six o'clock to meet again at eight o'clock.

EVENING SESSION.

The President took the chair at 8 o'clock.

THE FINANCE COMMITTEE.

The Finance Committee submitted a supplementary report, on which the Council went into Committee of the Whole. The first clause stated that the examination of the Registrar's books showed that the contributions due from the members of the College had not all been collected, the amount collected being only $1,190. The Committee therefore recommended that the Registrar be instructed to use all diligence to collect the overdue assessments.

On the clause being discussed,

Dr. Aikins stated that the Registrar had used all diligence short of sueing the defaulters.

Dr. Morden suggested that it would be well to allow a public prosecutor to collect the fees.

Dr. Campbell thought that if the Territorial Division Associations were deputed to collect the fees, and were allowed one-half the amount received from members of the College resident within such territorial division, there would be no difficulty about the matter.

The clause was amended by striking out the recommendation to request the Registrar to use further diligence to collect the contributions. The annual fee was fixed at one dollar.

The second clause, recommending the payment of the following amounts, was passed.

ACCOUNTS ORDERED TO BE PAID IN THE REPORT OF THE FINANCE COMMITTEE OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO AT THE SESSION OF THE COUNCIL HELD IN JUNE, 1876.

FIRST REPORT.

McDougall & Gordon, prof'al services....	$ 40 00
Dr. Edwards' account.....	52 75
Dr. Daniel Clark.....	14 20
Dr. Henderson.....	10 00
Dr. Wm. Clarke.....	37 93
Monetary Times.....	421 60
Willing & Williamson	140 00
Rolph, Smith & Co.....	94 30
Dr. Graham.....	10 00
James Beattie	6 50
Globe Printing Office	53 10
Mail Printing Office.....	36 50
Dr. Fulton.....	5 00
The Treas. of the Council for past year...	50 00
The Treas. for services during the present year.	200 00

SECOND REPORT.

Dr. Morden for attendance at Examination Committee Meetings.....	$20 00
Dr. McLaughlin " " " "	5 00
Dr. Dan'l Clark " " " "	20 00
Dr. Edwards " " " "	24 05
Dr. Allison " " " "	5 00
Dr. Henderson, travelling expenses.....	6 75
Dr. Lavell, travelling expenses	11 00

In Council, the report as amended was adopted.

THE CASE OF MRS. EBY.

Dr. Bethune brought up the report of the Registration Committee in the case of Mrs. Eby. It stated that the Committee met a deputation of medical men from the county of Waterloo Medical Association with regard to the case of Mrs. Eby, who had applied for registration, and after considering the matter, passed the following resolution :—"That the case of Mrs. Eby be referred out of courtesy to the representatives at large in this Council, as the matter had heretofore been under their consideration."

The report was adopted.

THE SELECTION OF EXAMINERS.

Dr. Allison's motion to alter the mode of appointing the examiners was again brought up for discussion, and was at once voted upon and negatived.

SALARIES BILL.

Dr. Allison's Bill to fix the salaries of the officials was read a second time.

The Council having first rescinded the clause in the report of the Finance Committee affecting the salaries, resolved itself into Committee of the Whole upon the Bill.

The salary of the Registrar was fixed at $750 per annum; of the Treasurer, $250; the allowance to members of Council while attending its meetings, $8 per day, and to members of committee, $5 per day.

The Committee rose and reported.

ELECTION OF OFFICERS.

Dr. Pyne was elected Registrar and Dr. Aikins, Treasurer.

The Council adjourned till nine o'clock this morning.

FOURTH DAY.

Dr. Morden moved "That a public prosecutor be appointed to institute proceedings against all irregular practitioners in Ontario, and to collect the annual fees from regular practitioners." Dr. Logan seconded.

Dr. Ross moved, in amendment, a resolution recommending that the Electoral Division Associations institute the necessary prosecutions against illegal practitioners.

Dr. Dewar spoke of the success which had attended the prosecution of illegal practitioners in his division. He stated that he knew of instances where any amount of evidence was forthcoming, but the whole case fell through, because of the disinclination of individual members of the profession to allow their names to be mentioned in the case. He was in favour of establishing electoral associations. Dr. Ross's amendment was lost. The original motion was carried.

Dr. William Clark moved "That Mr. Thos. Rollston, of Walkerton, and Mr. Hogg, of

Paisley, be public prosecutors for the county of Bruce." (Carried.)

Dr. Carson moved "That the members of this Council receive no fees for their attendance at the meetings of the Council." An amendment that the motion be laid on the table was carried.

Dr. Ross moved, and Dr. Allison seconded, "That the College of Physicians and Surgeons desire to convey to the Senate of the University of Toronto their sincere thanks for the use of the University Buildings, and also to express extreme regret for the occurrences during the recent examinations of this Council, and that this Council will use their utmost exertions to prevent the recurrence of the same in the future." After considerable opposition, this motion was carried.

Dr. Henwood moved "That this Council make application to the Legislature of Ontario at its next meeting, praying that the Medical Act be so amended that the territorial divisions shall return two members each to this Council instead of one." Dr. Henwod considered that business would be expedited by there being a larger number of members for Committee work, and that there would be a larger number from which to select examiners.

Drs. Wm. Clark and Bethune spoke against the motion. Dr. Ross favoured the motion. The motion was allowed to lie on the table.

Dr. Dewar presented the report on rules and regulations. The report was as follows :—

Your Committee have carefully gone over the voluminous correspondence in reference to Dr. J. L. Buckhart, and beg to report that Dr. Edwards, ex-President of the Council, being authorized to grant a temporary permit to practise to the said Dr. J. L. Buckhart, until the late spring examinations, at which Dr. John L. Buckhart failed to present himself for qualification; and, therefore, having failed to do so, your Committee report that Dr. John L. Buckhart, if found practising medicine in Ontario, is doing so illegally. Your Committee further report that they have received a tariff of fees from the Territorial Medical Society of Saugeen and Brock, and recommend the acceptance of the same by the Council, and that it receive the signature of the President and be signed with the seal of the Council, and that the same become the legal tariff of fees for the said territorial division. Your Committee also recommend that the claim of Dr. Campbell, for expenses incurred in carrying out the instructions of the Executive Committee in making application to the Legislature of Ontario and the Dominion Parliament for Government aid to this Council, and in endeavouring to obtain a proper tariff of fees, to the amount of $40, be paid.

In Committee, Dr. Ross moved, "That the clause referring to Dr. Campbell's claim he referred to the Finance Committee."

Dr. W. Clarke considered the clause should have the serious consideration of the Finance Committee.

The Chairman ruled the motion out of order.

The report was received and adopted.

PROCEEDINGS OF COUNCIL.

Dr. Clark presented the report of Special Committee appointed to regulate the proceedings of Council. The Committe had only time to examine the by-law to end of section 8, subsection 2, and certain corrections in said by-law, and recommend that same corrections be embodied in said by-law, and that 100 copies of the said by-law be printed for distribution, by the Registrar, to the members of Council.

The report was received and adopted.

REGISTRATION COMMITTEE.

Dr. Bethune, of Glanford, presented report of the Registration Committee. The Committee recommend that Dr. F. Le. M. Grasett be allowed to register, on passing the final examinations before the examiners on the subjects required for such final examinations for the College of Physicians and Surgeons of Ontario, and that such examination be passed within one year from the present date. In the case of the persons referred to in the petition of Dr. Hope and others, and also the case of Dr. Chaffey, we recommend that they be allowed to register on compliance with the terms contained in the foregoing clause as applied to Dr. Grasett. We refer the application of Dr. R. H. Hubenstreet, of Buffalo, to the clause respecting the examinations which applies to his case, and recommend that the Registrar be

instructed to forward him copies of same. Your Commi tee have examined the Registrar's books and office and found everything in perfect order. It is also found that 93 persons have registered since our last report, 124 names have been added to the students' list, and that the Registrar has received notice of 12 deaths.

In reply to Dr. Dewar, it was stated by Dr. Bethune that F. Le M. Grasett had not passed his primary examination. There were many cases of the same kind coming up, and the Committee thought they would allow this matter of registration to stand for another year, with the view of eventually getting rid of it. He believed it was thoroughly understood that this would be the last year of such registrations being allowed.

Dr. Clarke considered it would be impossible for the Council to agree to such a resolution. They would have to repeal the by-laws and almost the whole statute if they allowed this to pass, as the examinations were fixed by by-law.

Dr. Lavell stated that he had known young men snapping their fingers at the Council, and stating that they would go to England and get themselves registered in spite of the Council.

Dr. Dewar said this same thing had been discussed before the Council a year or so ago. He would move, "That the clause referring to the registration of the medical men be expunged from the report."

Dr. Aikins considered that if they gave way in this matter they might as well throw away the Act. It was unfair that persons studying at other places and then coming back here should be recognized, and their own University not recognized at all.

Dr. Bethune proposed to amend the clause by striking out all words after "register" and insert the words "on complying with the rules of the Council." Carried.

The report, as amended, was received and adopted.

EDUCATION COMMITTEE REPORT.

Dr. Clarke presented the Education Committee's report:—The Committee recommend the following change in the curriculum: Elementary Botany (text book Gray's first lessons) to be added to compulsory subjects in matriculation, and expunged from medical curriculum; also, that 6, 7, 8 books of Charles XII be substituted for 1, 2, 3 books, and that "Stewart's Physics" be added as a text book in natural philosophy. These changes to take effect in June 1877. The medical examinations for 1877 to be held in Toronto and Kingston, at such time as may be fixed by the President; that all students commencing their attendance on medical lectures after July, 1876, must submit to the annual examinations. The unsuccessful candidates for matriculation to have the usual rebate. The following were recommended as examiners on the subjects assigned them for the coming academical year:—Medicine, Medical Diagnosis, Pathology, and Medical Botany, Dr. F. Fowler; Surgery and Surgical Pathology, Dr. Robertson; Materia Medica and Sanitary Science, Dr. H. H. Wright; Midwifery, &c., Dr. Joseph Workman; Chemistry, theoretical and practical, Dr. Morrison; Anatomy, descriptive and surgical, Dr. McLaughlin; Physiology and Microscopical Anatomy, Dr. Grant; Medical Jurisprudence and Toxicology, Dr. Logan; Homœopathic Examiner, Dr. Morden; Matriculation Examiners, Messrs. A. McMurchy, S. Woods.

In discussing the arrangements for examinations and examiners' fees, Dr. Aikins spoke at some length on the importance of making the examinations as demonstrative as possible. It was the desire of the Council that students should possess practical as well as theoretical knowledge of the subjects upon which they were examined. It was an easy thing for a man to get up his anatomy from "Gray," and many of them who appeared to know "Gray" by heart had very little practical knowledge of anatomy. The speaker gave some striking and amusing instances illustrative of this, and concluded by saying that the Council had no desire to send out doctors who, if suddenly called to attend a patient who had met with an accident, would let him bleed to death before they could decide what to do for him.

The report was received and adopted.

REMUNERATION OF OFFICIALS.

Dr. Allison introduced a by-law fixing the remuneration to be paid to officials. The

Registrar's salary was fixed at $750 per annum; Treasurer, $250; members' allowance for attending meetings of the Council, $8 per day and travelling expenses; members attending executive and other committees, $5; Medical examiners $100; Matriculation examiners $2 for each candidate.

Detective Smith, of Toronto, was appointed public prosecutor for Ontario, provided that he gives satisfactory security that he will carry out the instructions of the Council.

Dr. McLaughlin moved, seconded by Dr. Ross:—"That the President, Vice-President and Treasurer be the Executive Committee for the year."—Lost.

The usual votes of thanks were passed, and a present of $100 was voted to Dr. Campbell. Dr. Ross alone dissented, on the ground that although he had no personal objection to Mr. Campbell's receiving $100, he did object to the establishment of such a precedent.

The Council then adjourned *sine die*.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At the meeting of the Council in April last, Dr Sieveking was appointed Examiner in Medicine. With regard to the admission of women to the examination for the degree of L.M., it was agreed that Mesdames Jex Blake, Thorne, and Peachy should be informed that the members of the Board of Examiners in Midwifery having resigned their offices, the Council are obliged to postpone the holding of examinations for certificates of qualification in midwifery. It appears that Dr. Graily Hewitt has withdrawn his name as a candidate for the vacant Examinership in Midwifery, and the Council are not inclined to offer the appointment to the younger class of obstetricians. The Council, finding that the number of Fellows is yearly growing less, or in other words, that the number who take the fellowship by examination is insufficient to maintain the numerical strength of the present body of Fellows, has determined upon altering that examination in such a manner that it shall in future be less difficult for a member of the College engaged in practice to prepare himself for and to pass the examination for the fellowship.

Miscellaneous.

M. Behier, Professor of clinical medicine in the Hôtel Dieu, Paris, died on May 8th.

A well-known dentist in Paris has been arrested, accused of having, for four years past, while drawing and cleaning teeth, introduced slow poison into rich patients' mouths, at the instigation of their heirs, and thus committed many murders. Two hundred witnesses are said to bave been subpœnaed.

Mr. Thomas Keith, of Edinburgh, reports in the *London Lancet* fifty cases of ovariotomy in which the pedicle was divided by means of the actual cautery, as first recommended by the late Mr. Baker Brown. The results show 92 per cent. of recoveries, the best that this very successful operator has yet had.

PARISIAN MEDICAL STUDENTS.—The number of students of medicine registered this year by the Faculty of Medicine is six thousand five hundred. Six millions of francs have been voted to the city of Paris for the erection and perpetual endowment of additional buildings for this renowned medical school.

DEATH OF BALARD.—Balard, the famous chemist, and the discoverer of bromine, has recently died at the age of 73 Balard was Professor of Chemistry at the Collége de France, a Member of the Institute, and a Knight Commander of the Legion of Honour. He had attained the highest scientific post of his country, and received all the honours which in France are conferred on eminent men of science.

AN Englishman who insulated his bedstead by placing underneath each post a broken-off bottom of a glass bottle, says that he had not been free from rheumatic gout for fifteen years, and that he began to improve immediately after the application of the insulators. A local paper wisely adds: "There's many a fellow who could cure his gout, if he would break off the bottoms of his glass bottles in time."

Death from Ether.—In the May number of the *Chigaco Medical Journal and Examiner*, Dr. E. L. Holmes, Prof. of Diseases of the Eye and Ear in Rush Medical College, reports the death of a patient operated on by him for cataract. This patient had taken ether before safely and every care and precaution seem to have been observed in the administration on this occasion.

According to the *Daily News* correspondent, Malta is not the place for a medical man desiring to realise a fortune. The professional fees of physicians and surgeons are regulated by an ordinance of Council, and are absurdly small. For a visit between sunrise and two hours after sunset, the "professor" is entitled to only one shilling; for a consultation, his fee is an additional two shillings. For a medical certificate, the tariff is half-a-crown.—*Brit. Med. Journ.*

A Pleasant Way of Taking Castor Oil.—Mix ten grains of powdered tragacanth with two drachms and a half of water; upon this pour very slowly, drop by drop, half an ounce of castor oil, stirring constantly with the pestle. When the mixture is complete, add about three ounces of water, an ounce of syrup, and a few drops of laurel-water. In this manner a white emulsion is obtained, in which the taste of the castor oil is (according to the *Paris Médical*) quite masked, and replaced by the perfume of the laurel-water.—*London Lancet.*

Bromide of Iron in Chorea.—Prof. Da Costa prefers bromide of iron to all other remedies in the treatment of chorea. He gives it in increasing doses, commencing with five grains for a child, and rapidly increasing to twenty grains. He states that it is also of much value in the treatment of incontinence of urine in children, local chorea or clonic muscular spasms, as twitching of the eyelids, etc., in hysterical women, is often cured by bromide of iron, when other remedies have failed.—(*New Remedies.*)

Iodide of Potassium.—Dr. Laurie, of Glasgow, holds that the one distinct and indisputable action of iodide of potassium is that of stimulating the mucous membranes. He states that in cases of chronic, hard, dry cough, hours of suffering may be obviated by taking advantage of the powers of iodide of potassium to restore and promote the secretion of the bronchial mucous membrane, thus relieving the congested bloodvessels and producing comparative tranquillity of breathing. When the secretion of mucous has set in, the salt should be used with caution, or its administration discontinued.—*Ed. Med. Jrnl.* (June), from *Brit. Med. Jrnl.*

Valentine's Meat Juice.—During the latter part of the winter, the manufacturers sent me a dozen bottles of this preparation. More than half of this supply was used in the wards of Charity Hospital. It is undoubtedly the very best of all the various concentrated meat foods which have been furnished the profession. It was given with especial benefit to cases of typhoid fever, yellow fever, chronic diarrhœa and dysentery, pulmonary phthisis, and to patients in the third stage of pneumonia. In private practice I have found it invaluable in all forms of disease—adult or infantile—which require forced alimentation.—*Dr. Bemiss in the New Orleans Med. and Surg. Journal.*

A Heavy Dose of Mercury.—"A few days ago," says a California paper, "Mrs. Anna Babb's little boy drank a pound of quicksilver. The child is less than three years old, and even in California is considered rather young to indulge in so strong a beverage. He found the mercury-bottle in some rubbish in an old trunk while playing, and drank the whole, leaving but a few drops. The physician was sent for, who administered some light remedy. The child gave no other indication of having taken the mercury than drowsiness. The metal did not all leave the stomach for ten days, but he was about all the time, and is now as bright as ever."

Decrees of the Court of Appeals.—The French Court of Appeals delivered the following decision on March 31, 1876: "A physician is guilty of swindling, who, by means of lying advertisements, vaunts his method of treating diseases, and publishes certificates which he has

obtained fraudulently, and which certify falsely to cures of diseases declared incurable by other physicians." Again, by a decision of the 25th of last March, an apothecary who, without the prescription of a physician, when the case was not of urgent necessity, sells a medicinal preparation, composed of several different ingredients, renders himself liable to prosecution for the illegal practice of medicine.—*N. Y. Med. Rec.* (June), from *Bordeaux Med.*

Nelaton's Method in a Chloroform Accident.—Mr. Lawson Tait states (*The Practitioner*, February, 1876) that while performing Amussat's operation on a thin, delicate, and much-exhausted patient, he suddenly found that the respiration, carotid pulsation, and heart-beat had ceased. He immediately inverted the patient, and directed his colleagues to imitate respiration by compressing the chest at intervals. The patient after a time revived, and Mr. T. is convinced that he was thus saved from the loss of his patient. He adds: "Since July I have used nothing but anhydrous sulphuric ether for operations; and though it is far from being so convenient as chloroform or methylene ether, I think we are not justified in using any other anæsthetic, save in cases of young infants and pregnant women, among whom no chloroform accident has yet been recorded."

Rules in Adminestering Arsenic.—Dr. H. Griffith, in the *Medical Press and Circular*, states that the following rules relative to the administration of arsenic should be carefully observed:—

1. It should never be given where there is a feverish state of the system; a quick pulse and a hot skin contra-indicate its employment.

2. It should be given shortly after meals—never on an empty stomach.

3. It should not be given in the solid form, nor should it be given in increasing doses. As a rule, five minims of Fowler's solution should be the maximum dose for an adult.

4. The dose should be diminished, or the administration altogether ceased, on the occurrence of pain in the epigastrium, nausea, or irritation of the eyelids.

The "Florida Cough."—The New York *Gazette* has the following hit:—The most popular fashionable affectation among young ladies ravenous for social notoriety is the "Florida cough," which is regarded by those who have been abroad as a fine substitute for "Roman malaria," so fashionable a few years ago. The Southern malady is supposed to be contracted sitting on the piazza of a Magnolia or Jacksonville hotel, flirting and eating oranges alternately. Those who have never been near either place suffer dreadfully from the disease.

Removal of a Button from the Bronchus.—An eminently successful and novel method was resorted to on great emergency for the removal of a button from the left bronchus of a lad, at the London Hospital, on the 12th inst. The patient, aged thirteen, had accidentally slipped the button into his trachea on April 23rd, where it had remained without producing very serious symptoms until May 11th, when it fell into the left bronchus, producing symptoms of collapse in the lower lobe of the lung. Mr. Maunder, having performed tracheotomy, first inverted and shook the patient, but without success; he then placed the patient on his back and pressed through the wound into the left bronchus about seven inches of looped silver wire, and was successful in withdrawing the button, together with a quantity of mucopurulent matter. The patient's urgent symptoms rapidly disappeared, and he is at present doing well.

Lead Poisoning from Substances not usually Suspected.—The *Gaz. Med. Ital.* reports some cases of lead poisoning from the use of wafers coloured with oxide of lead. Red wafers being in such general use, and the mouth being so convenient for moistening them, to say nothing of the habit of chewing them in moments of legal or judicial meditation, it becomes a matter of importance to note the fact that they may be thus poisonous in their nature.

Another case is reported of a patient who was in the habit of using, for diarrhœa, catechu manufactured in Bologna, which, when analyz-

ed, was found to yield to him about 1½ grains of lead per diem.

Another case is given of a lady and her daughter who were poisoned by the "use and abuse" of a cosmetic powder containing 0.20 of white lead.

In another article the *Gazetta* also notices that in France the Prefect of police has forbidden the sale of Cincinnati hams, because they came done up in cloth coloured yellow with chromate of lead.

California State Medical Society.—Dr. Cheney, Chairman of the Committee on Ethics, made a report on the subject of the ownership of prescriptions, which was referred to the Committee last year. The report recommended the adoption of the resolution then offered by Dr. Stout, declaring that the written prescription of a physician is the property of the physician and not of the patient or druggist, and that it ought not to be renewed by the latter without a special order from the physician prescribing. The resolution was adopted by the society.

The following report was presented, on the subject of the admission of female members:

"We the Board of Censors, to whom was referred the application of the ladies holding diplomas regularly conferred upon them for membership in this society, beg leave to report that we know of no valid reason why the society should not admit ladies to full membership. We therefore recommend their admission. Signed, C. A. Kirkpatrick, H. P. Babcock, C. L. Tyrrel, H. Gibbons."

Native Mexican Midwifery.—Dr. Thomas, Jr., writes to the Virginia *Medical Monthly*: I find that the following is the way in which a regular Mexican midwife performs her duty: A rope is suspended from the ceiling. Under the loose end of this a folded blanket is placed, on which the woman kneels and grasps the rope, arms extended. Behind her is placed a strong man, with his arms around her waist, while in front sits the midwife, with both hands against the perineum. When a pain comes on, the woman pulls on the rope, the man squeezes, and the midwife bears against the perineum, which she at the same time strokes from behind forward. After the child has been thus squeezed, shaken and jolted out, the woman is then put to bed and arranged in the sitting posture, with a sheet around her waist, in which is wrapped an ovoid lump of horse manure, baked, cooled, and packed into this shape. This horse manure is supposed to have the virtue of keeping the blood in its neighborhood.

Rupture of the Spleen.—Dr. Finnell presented a spleen with the following remarkable history: The patient was twenty-eight years of age, and the mother of three children. There was no history of previous disease. Suddenly, while lifting a stove, she felt that something gave way, and consequent on this, severe pain in the abdomen. At that time the patient was in the third month of her pregnancy. The abdominal pain continued steadily for three days, when abortion came on, and on the following day she was delivered of a decomposed fœtus. The physician who was called on to attend her during the abortion suspected, from the severity of the pain, that the patient was suffering from peritonitis. Four hours after delivery the patient died. At the autopsy, two pints of blood were found in the peritonæum, and on examining for the cause it was noticed that blood was escaping from fissures in the spleen. There was no extravasation in or about that viscus to show the effect of injury. The spleen weighed five ounces, and resembled currant jelly. The other viscera were healthy. The points of particular interest in the case were, the absence of all signs of peritonitis and the presence of rupture of an organ like the spleen, without any history or signs of direct injury.—*New York Pathological Society.*

The Kentucky Shower of Flesh.—At last we have a proper explanation of this much talked of phenomenon. Mr. L. Brandeis writes to the *Sanitarian*, for May:—

In 1537, while Paracelsus was engaged in the production of his "elixir of life," he came across a very strange-looking vegetable mass, to which he gave the name of "Nostoc."

The want of rapid transportation, combined

with the perishable nature of the substances fallen, have hitherto prevented a complete and exhaustive examination. The specimens of the "Kentucky shower," however, reached this city well preserved in glycerine, and it has been comparatively easy to indentify the substance and to fix its status. The "Kentucky wonder" is nothing more or less than the "Nostoc" of the old alchemist. The Nostoc belongs to the confervæ; it consists of translucent, gelatinous bodies joined together by threadlike tubes or seed-bearers. There are about fifty species of this singular plant classified; two or three kinds have even been found in a fossil state. Like other confervæ, the Nostoc propagates by self-division as well as by seeds or spores. When these spores work their way out of the gelatinous envelope they may be wafted by the winds here and there, and they may be carried great distances.

Wherever they may fall, and find congenial soil, viz., dampness or recent rain, they will thrive and spread very rapidly, and many cases are recorded where they have covered miles of ground, in a very few hours, with long strings of Nostoc.

On account of this rapidity of growth, people almost everywhere faithfully believe the Nostoc to fall from the clouds, and ascribe to it many mysterious virtues. The plant is not confined to any special locality, or to any climate; sown by the whirlwind, carried by a current of air, in need of moisture only for existence and support, it thrives everywhere. Icebergs afloat in mid ocean have been found covered with it. In New Zealand it is found in large masses of quaking jelly, several feet in circumference, and covering miles of damp soil; and in our own country it may be found in damp woods, on meadows, and on marshy or even gravelly bottoms.

All the Nostocs are composed of a semi-liquid cellulose and vegetable proteine. The edible Nostoc is highly valued in China, where it forms an essential ingredient of the edible bird-nest soup. The flesh that is supposed to have fallen from the clouds in Kentucky is the flesh-colored Nostoc (*N. carneum* of the botanist); the flavour of it approaches frog or spring chicken legs, and it is greedily devoured by almost all domestic animals.

Such supposed "showers" are not rare, and are entirely in harmony with natural laws. In the East Indies the same Nostoc is used as an application in ulcers and scrofulous disease, while every nation in the East considers it nourishing and palatable, and uses it even for food when dried by sun heat.

WHILST the Prince of Wales was at Lisbon on returning from his Eastern tour, His Royal Highness paid a visit to the flag-ship, the *Minotaur*, and a number of naval officers were on that occasion presented to the Prince. The naval medical officers, however, were conspicuous by their absence, and the circumstance not unnaturally gave rise to some surprise and comments. As we have good reason for knowing that the fact did not escape the attention of the Prince of Wales, and that His Royal Highness caused it to be subsequently intimated to the medical officers that it was not in accordance with his Royal Highness's desire, the blame may be fairly attributed to the Admiral and Naval authorities. The Admiralty may issue Warrants and Orders in Council for the improvement of their medical service, but it is this sort of thing which makes that service unpopular with medical men possessed of the self-respect found in gentlemen of every service. —*Lancet.*

Births, Marriages, and Deaths.

BIRTHS.

At 295 Dundas Street, London, on June 10th, the wife of Dr. W. H. Street, of a son.

MARRIAGE.

At St. Paul's Church, Kingston, on June 7th, by the Rev. W. B. Carey, M.A., Incumbent, John Kennedy Oliver, Esq., M.D., to Mary Ellen, second daughter of Richard Town, Esq.

DEATHS.

In Montreal, on Monday, 29th May, Catherine Joseph, aged 66 years and 3 months, beloved wife of Dr. A. H. David.

At his residence in Colborne, on Tuesday, 13th inst., W. C. Deans, M.D., late of Oshawa, aged 39 years.

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TORONTO, AUGUST, 1876.

Selections: Medicine.

SOME FORMS OF DYSPEPSIA.*

BY FRANCIS DELAFIELD, M.D.

(Adjunct Professor of Pathology and Practical Medicine, in the College of Physicians and Surgeons, New York.)

GENTLEMEN:—We see during every year at the College Clinique, a considerable number of patients suffering from dyspepsia. In other words, they are patients suffering from a number of unpleasant symptoms, and these symptoms are due to the fact that their food is not properly digested.

In treating these patients, we can sometimes determine which of the viscera concerned in the digestive process is in fault. You know that the digestion and absorption of our food is effected by the physiological action of the stomach, the small and large intestine, and the liver. You will find, in practice, that you can distinguish cases of dyspepsia dependent upon diseased function of the stomach, others due to the condition of the small intestine, others to that of the large intestine, others to that of the liver. Of the pancreas, our knowledge does not enable us to speak.

It is not by any means always, however, that you can make the diagnosis of stomach dyspepsia, intestinal dyspepsia, liver dyspepsia, as the case may be; you will find some patients in whom none of the viscera act normally, and other patients in whom the symptoms do not enable you to locate the disease.

After excluding all these cases, however, you will still find many persons in whom only one of the digestive organs is at fault.

Now let us see what are the characteristic symptoms of the different anatomical varieties of dyspepsia, and first, what are the symptoms of dyspepsia dependent on an abnormal state of the stomach.

The symptoms are nausea and vomiting, pain, loss of appetite, eructations of gas and of sour fluid.

The nausea and vomiting follow the ingestion of food, and seem to be directly due to the presence of the food. There may be only slight nausea after each meal, or every meal may be followed by vomiting. Both the nausea and vomiting may follow every meal, or they may select some part of the day—morning, noon, or evening—and only occur after the meal taken at that time. In some patients, such a condition of nausea and vomiting will continue for years. The vomited matters consist only of food, or of food mixed with a sour fluid; of this, the patient may vomit several quarts during each attack.

The pain also follows eating: it varies from a mere feeling of oppression to the most intense agony. The pain, like the vomiting, seems to be due to the presence of food in the stomach, and is usually relieved if the stomach is emptied. The pain is regularly followed by a desire to vomit, and after this is done the pain ceases. A fragment of bread not larger than a chestnut, remaining in the stomach, is sometimes sufficient to keep up the pain and retching for hours, until it is expelled. The appetite is usually small, capricious, and unnatural. The patients

* [Indigestion is so productive of bowel affections during the hot season, that we feel quite warranted to occupy the space required to give Prof. Delafield's novel ideas on the subject to our readers, as being suggestive if they cannot be followed literally.]

often dread to take food on account of the pain and vomiting which they know will follow. In the older cases, there are frequent eructations of gas from the stomach. These may be so frequent and noisy as to be a serious annoyance. If the stomach be dilated, as is sometimes the case, this can be distinguished by percussion and palpation.

If the disease is of long standing and severe, the patients lose flesh and strength, and present a very deplorable appearance.

The lesions consist in a chronic inflammation of the mucous coat of the stomach, with a loss of power in the muscular coat. The inner surface of the organ is constantly coated with an increased quantity of tenacious mucus. The connective tissue between the gastric tubules is increased in amount, and the tubules themselves become atrophied. The stomach is sometimes found very small—in other cases much dilated.

The milder cases of the disease can often be cured by regulating the diet and life of the patient, without much resort to medical treatment. The severer cases are only temporarily benefitted by such means.

The patient whom you see to-day is an example of the more severe form of stomach dyspepsia. She is an Irish servant girl, 40 years old. About two years ago she began to have pain and vomiting after her meals. After nine weeks these symptoms ceased, and she enjoyed tolerable health until eight months ago. At that time, she again began to vomit about fifteen minutes after eating. At the same time, there was a dull boring pain in the epigastric region and extending into the back. She has never vomited blood. The pain and vomiting continued; she became much emaciated, and was so feeble as to remain in bed much of the time. Her appetite continued to be good; her bowels were somewhat constipated. I saw her for the first time five months after the commencement of her illness. She was then very feeble and emaciated. She had been put under a variety of medical treatment and had been kept on milk diet for some time, but without relief. The pain and vomiting would cease for a few hours or a few days, and then return.

In the epigastric region was a globular tumor, tympanitic on percussion, which I supposed to be the dilated stomach. At that time, three months ago, I stopped all drugs and washed out her stomach with the stomach-pump every day. This treatment was continued, with occasional intermissions, for two months. The pain and vomiting became less frequent, and then ceased entirely. She has steadily recovered her strength and flesh, and is now able to work. For the past month the pumping has been discontinued, and her health has continued good.

As a companion to this case, let me read you the history of a gentleman who has been under my care for a considerable length of time. He was a man 45 years old, by occupation a broker. About sixteen years ago he began to have attacks of pain and discomfort in the epigastric region, lasting several days, and ending in an attack of vomiting. These attacks occurred about once in four weeks. At that time his habits were irregular. His food was often eaten hastily, he worked hard during the day, used stimulants pretty freely, and frequently ate late dinners and suppers. In this condition he continued until about six years ago. At that time the attacks of pain and vomiting gradually became more frequent, were more readily excited by indiscretions in diet, and left the patient feeble and prostrated for several days. Any preparations of alcohol were almost certain to bring on one of these attacks. From time to time he consulted different physicians, and followed out several plans of treatment. On several occasions he became so much better as to think himself cured, but, sooner or later, the old symptoms always returned. The attacks of pain and vomiting gradually became more and more frequent, until they occurred almost every day. The pain was always the most distressing symptom, and the patient would often voluntarily excite vomiting in order to relieve the distress.

Finally, he was placed on a milk diet. This diet he carried out strictly for six months. For the first four months the attacks of pain and vomiting ceased, but, after that time, again recurred.

In the summer of 1874 he came under my care. I commenced to wash out his stomach with the pump, at first, every other day, and then every day. He soon learned to use the

instrument himself, and has continued to use it up to the present time. He eats all the ordinary articles of diet, has gained much in flesh and strength, and with ordinary prudence in diet, could easily give up the pump altogether. But, as he finds he can always prevent the bad effects of improper food, he is apt to take good dinners and suppers as he pleases, and pump himself out afterwards.

These two cases, gentlemen, will give you an idea of what I mean by dyspepsia confined to the stomach.

You will observe that in both cases we have the same set of symptoms—attacks of pain and vomiting, coming on, first at long, and then at short intervals. The attacks always excited by the ingestion of food, and the pain ceasing when the stomach is emptied. The disease lasting for years, and growing steadily worse. Medical treatment alleviating the symptons for longer or shorter intervals, but never permanently.

For these cases, gentlemen, I believe the most rational and effectual treatment to be the systematic use of the stomach-pump.

The cause of the attacks seems always to be the presence of undigested food in the stomach. The longer the disease lasts, the less tolerant does the stomach become of any such substance, until, at last, every day there is an attack of pain and vomiting.

Why the stomach should become so irritable and intolerant of the presence of food, I do not know. Autopsies of such cases show only the lesions of chronic gastritis.

The vomiting, in these cases, seems to be the only effort made by nature to effect a cure. By the use of the stomach-pump we do the same thing, but much more easily and effectually.

Any pattern of stomach-pump will answer the purpose. It is more convenient to use one which holds about ten ounces. The œsophageal tube should be as large as can be easily introduced, and the holes at its end should be as large as possible. The best tubes are the English. They should be thoroughly softened in warm water before they are introduced. After the patient has become accustomed to the procedure, a piece of soft rubber tubing makes the best tube.

In introducing the tube, the patient should sit in a chair with the head upright—not thrown back. You will find that there are two points where the tube is sometimes grasped pretty firmly by muscular contraction—the lower part of the pharynx, and the œsophagus—just before it enters the stomach. Steady, but very gentle pressure usually overcomes that resistance very readily. In some patients, however, you will have to begin with a very small tube, until they become accustomed to it.

After the tube is introduced, you throw in about six ounces of tepid water, and then reverse the syringe, and draw out all the fluid that will come. Then again you reverse the pump and throw in water, and then again draw it out. This process you continue until the water comes out perfectly clear, and without any fragments of food. Adult stomachs will usually hold about twenty-five ounces of water; more than this gives distress.

The best time for washing out is the hour at which the patient has been accustomed to have his attacks of vomiting. If these attacks have occurred daily, the washing out should be done daily. After a short time, you can readily teach the patient to introduce the tube and manage the pump himself; after that, he can carry out the treatment at home, using the pump less and less frequently, as his health improves. At the commencement of the treatment, the patient should take for breakfast and tea nothing but milk, for dinner, mutton chops and baked potatoes. As he improves, you increase his solid food until he eats all the ordinary articles of diet. The rule is not to use the pump until three hours after a meal of solid food, in order that the stomach-tube may not be obstructed by large fragments.

Now let us consider those cases in which the symptoms are due to functional derangement of the small intestine, the stomach being unaffected.

In these patients the symptom which is apt to be the most troublesome is pain. This pain may be referred to any part of the abdominal cavity. It is usually described as a constant dull pain, not like that of colic. It has no special relation to the ingestion of food or to its quality. It occurs when the stomach is full or

empty; whether the food is spare and simple, or abundant and rich. The use of liquor will usually stop it for a short time. There may be some particular time of the day at which the pain comes on with tolerable regularity; very often this will be late in the afternoon.

There may be nausea, but not vomiting. The nausea does not follow eating, but is apt to occur in the morning.

The appetite often remains good. Food is taken with relish and causes no distress.

The bowels may continue to act with perfect regularity. Flatulence is a common, but not a constant symptom.

The patients are up and about, and able to attend to their business, but they feel languid and good for nothing. Sometimes they become much alarmed about themselves, and imagine that they are suffering from cancer or some other serious disease.

Not infrequently persons have several attacks of this condition, at intervals of several months. The earlier attacks only last a few days, the later attacks are more severe, and may last weeks and months.

Some of the cases are very easily relieved by treatment, others prove very obstinate.

The drugs usually indicated are cubebs, ipecac, and assafœtida. Cubebs may be given in the form of powder or of tincture. Ten grains of the powder, or twenty minims of the tincture is the usual dose, to be given three or four times a day. Ipecac is given at first in small doses—one-eighth of a grain—and then increased gradually up to one to four grains, three times a day. Assafœtida may be given in four-grain sugar-coated pills, or in the shape of the compound Galbanum pill.

Riding on horseback is often of very great service; walking, on the other hand, does not seem to be of as much benefit. Travelling for several months from place to place may effect a cure, when all other remedies fail.

I am unable to show you any case illustrating this variety of dyspepsia. It is rare among clinique and hospital patients, although in private practice it is sufficiently common.

Dyspeptic symptoms dependent upon disordered function of the liver are very common. The great majority of cases of dyspepsia coming to this clinique are cases of liver dyspepsia, either alone or combined with disorders of the other digestive organs.

In this variety of indigestion the symptoms are very variable, and often very intractable to treatment.

Physiologists teach us that the liver performs several important functions. These functions are very well summed up by Murchison as follows:

1st.—The formation of glycogen, which contributes to the maintenance of animal heat and to the nutrition of the blood and tissues, and the development of white blood corpuscles.

2nd.—The destructive metamorphosis of albuminoid matter, and the formation of urae and other nitrogenous products, which are subsequently eliminated by the kidneys; these chemical changes also contributing to the development of animal heat.

3rd.—The secretion of bile, the greater part of which is re-absorbed, assisting in the assimilation of fat and peptones, and probably in those chemical changes which go on in the liver and portal circulation; while part is excrementitious, and, in passing along the bowels, stimulates peristalsis and arrests decomposition.

It is not easy in any given case to say which of these functions of the liver is disordered and gives rise to the existing symptoms. I have found it convenient, however, clinically, to divide these patients into two classes according to their general condition. In the first class I include those of florid complexion, and with well-developed adipose and muscular tissues. In the second class I include those of pallid complexion, spare figure, and feeble muscles.

It has seemed to me that in the first class the symptoms are due to the derangement of those functions of the liver which should effect the destructive metamorphosis of albuminoid substances, so that the patients receive a full supply of the nutritious portions of the food, but do not get rid of the excrementitious.

In the second class of cases, on the other hand, there is no failure of these destructive and excretory functions, but those functions which should effect the assimilation of fat and peptones are disordered so that the patient is imperfectly nourished.

In the one case, the tissues are over-manured, but badly drained; in the other they are well enough drained, but not manured at all.

I will show you first an example of the second class.

This man is thirty years old, a policeman by occupation. He tells us that his health has been good until within the last year. During this time he has gradually lost flesh, strength, and colour. His appetite is sometimes good, sometimes not; occasionally there is slight nausea in the morning. He has a dull, uncomfortable feeling in the head much of the time. There is a dull pain in the right hypochondriac region. His bowels are constipated. During the year he has consumed a large quantity of medicine at different times. His urine is normal, except for an increased amount of oxalate of lime.

You may see that his face is thin, pale, and anxious. He is very much alarmed about himself. This man's condition I believe to be due to the fact that his liver does not properly perform its functions of excreting bile. This is felt in two ways. There is insufficient assimilation of fat and peptones, and the large intestine does not feel the natural stimulus of the excrementitious bile.

Some of the patients belonging to this class are much troubled with flatulence.

Headache is a very common symptom and often very distressing. Curious nervous feelings in different parts of the body are often complained of. The patients say that the top of their heads feel like ice, or that they have cold chills down the back or limbs, or pricking sensations in the skin, or a feeling of constriction about the body. Very often they are much troubled by sleeplessness. They are very apt to be much disturbed about their own condition, and even to become very hypochondriacal.

There may be irregular action of the heart and pain in the precordial region. There is also often dull pain in the right hypochondriac region, which may extend into the back and shoulder.

The bowels are usually constipated. The patients lose flesh and strength. The urine is normal, or contains an increased amount of oxalate of lime, or sometimes stellate crystals of phosphate of lime.

This condition is often very intractable to treatment, and always requires continuous and systematic care.

The diet is to be carefully regulated, but should be full and nutritious. Wines, ales, and spirits are often of service. Cream and even cod-liver oil are sometimes indicated.

To relieve the constipation, strychnia, aloes, sulphate of magnesia, rhubarb, and podophyllin answer a good purpose. Bromide of potash, assafœtida, and guarana are of service in allaying the nervous symptoms and restlessness. To improve the appetite and act as a tonic nothing is better than the mineral acids. Exercise in the open air is to be insisted upon, and, in young persons, bathing the entire body, every day, with cold water.

The general principle which you bear in mind in treating these cases is that their symptoms depend on the failure of the liver to perform its share in the process of digestion, and as a result of this, the fact that the entire body is insufficiently nourished.

You must also remember that the various pains and uncomfortable feeling from which these patients suffer give rise to many errors of diagnosis. Congestion of the brain, paraplegia, uterine disease, heart disease, pulmonary phthisis, are all ascribed, not so very infrequently, to patients suffering from liver dyspepsia alone.

In the first class of cases of abnormal liver function, the appearance of the patients differs widely from that of the patients of whom we have just been speaking. These patients are stout and well-developed, often of rosy, florid appearance. They are usually persons who live well, drink, and use tobacco freely. They may even be in the habit of taking a good deal of exercise.

In spite of their healthy appearance, however, we find the same depression of spirits and tendency to hypochondriasis. They are liable to headache, but more so to attacks of vertigo. These attacks of vertigo may be so severe that they fall to the ground and lose consciousness.

The appetite is usually good. The bowels are sometimes constipated, sometimes regular. There is often an occasional diarrhœa from very slight causes. The urine is very apt

to contain an excess of uric acid or of the urates.

In many cases, the first symptoms of which complaint is made are the vertigo and the uncomfortable feeling about the head, sometimes also an inability to apply the mind to business, and a partial loss of memory.

These patients sometimes discover that a brisk purgative makes them feel much better for several days, and they become regular customers of the vendors of the different kinds of purgative pills.

One of the first requisites for successful treatment is an entire abstinence from every kind of alcoholic drink. No wine, beer, or spirits should be allowed, not even in small quantities. Tobacco is equally pernicious in these cases; it should be absolutely prohibited.

These patients require, not merely ordinary out-of-door exercise, such as walking and riding, but often pretty violent muscular exercise, such as is afforded by the gymnasium.

They are often much benefited by the natural alkaline and sulphur waters.

As regards drugs, there is no general plan of treatment that can be laid down, but in each case you endeavour to meet the special indications, trusting for a cure to the general hygienic management of the case.

The principal symptom of dyspepsia due to the condition of the large intestine, is constipation. This symptom is common to all the varieties of dyspepsia, and occurs also with various other morbid conditions. At the present time, however, I wish to call your attention to a class of cases in which the condition of the large intestine is the sole cause of the patient's symptoms, and in which this condition causes not only constipation, but other symptoms of indigestion.

This condition of the large intestine occurs in old people. It seems to be due either to a loss of power in the muscular coat of the intestine, or to a loss of sensibility in the mucous coat.

In the milder cases the condition is not constant, but occurs from time to time. The patient fails to have an operation of the bowels for several days. He feels dull, languid, loses his appetite, has headaehe, is troubled with flatulence and uncomfortable feeling in the abdomen, which may even amount to colic. After a few days there is a slight diarrhœa. These passages are small, painful, do not give a feeling of relief. The patient is, at the same time, very much prostrated, vomits his food, and may even take to his bed. If you are called to attend these patients after the diarrhœa has begun, it is very important that you should recognise the true nature of the case. The administration of any preparation of opium, or of any drug which merely checks the diarrhœa, only does harm and prolongs the sufferings of the patient. A mild laxative, on the other hand, will very promptly relieve all the symptoms. The ordinary dinner pill is one of the best preparations for this purpose.

In the more severe cases the symptoms come on gradually. The patient is at first only a little constipated; the bowels move every few days, either of themselves, or with an enema, or with some laxative. And yet, during this time, the large intestine is not really emptied, but there is a constant accumulation of feces in the rectum. The constipation becomes gradually more pronounced, and the patient finds that enemata and mild laxatives no longer give him a movement. Then he may use more active purgatives, which produce a number of fluid stools and yet do not empty the large intestine of the hardened feces, which are still accumulating. So the patient goes on, from bad to worse, alternating between constipation and diarrhœa, always uncomfortable, often with very severe pain in the abdomen, losing strength rapidly. If the condition is not relieved, an old person may be so reduced in this way as to die without any other disease than constipation.

The first point in the treatment is to introduce your finger into the rectum and ascertain whether or not it is filled with hardened feces. If it is, the feces must be scooped out with the finger or some convenient instrument, and then the rectum should be washed out repeatedly until it is entirely emptied.

After this the patient must be constantly watched and examined, from time to time, to ascertain that the feces are not accumulating again. The diet must be regulated, and aloes

and strychnine may be employed to assist the action of the large intestine.

I have endeavoured thus to sketch out roughly for you some of the cases of dyspepsia in which only one of the digestive viscera is involved. I think that in your future practice you will be able to recognise some of these cases when you see them, and I think it will add much to your satisfaction in the treatment of all cases of dispepsia, if you make the attempt to analyze the mass of symptoms and assign them to the different viscera to which they belong.—Vol. ii., No. iv., *American Clinical Lectures*, edited by E. C. Seguin, M.D.

REPORT ON EIGHTY CASES OF CHOREA.

BY GEORGE S. GERHARD, M.D.

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In the *Philadelphia Medical Times* of January 3, 1874, I published a digest of thirty cases of chorea, which was of interest not only on account of its having been the first of the kind ever made on this side of the Atlantic, but also as showing certain peculiarities manifested by the disease as it occurs in this country. Since then forty additional cases have been reported in the same journal for March 27, 1875, by Dr. Chas. K. Mills.

The present collection embraces fifty new cases, to which, for more extended study, I shall add those previously reported. The majority of the cases were obtained as before from the case-books of the Infirmary for Nervous Diseases; the remainder were under Dr. Weir Mitchell's private care, the notes of which he kindly gave me, or were seen by me during my terms of service at the Children's Hospital.

In studying the eighty cases in regard to the *age* and *sex* of the patients, I find that there were—

Under 10 years of age .	28 cases	9 males	19 females
From 10 to 21 " .	52 "	18 "	34 "
Total	80 "	27 "	53 "

The preponderance of the females over the males shown by this summary agrees with the usual clinical experience, and may be explained by the greater liability of the former to disturbance of a nervous kind, and to their greater susceptibility, particularly during the age of puberty, represented by the second period of the foregoing table, to one of the great exciting causes of chorea, viz.: fright.

Side affected. — In twenty-seven cases the choreic movements were found to be general; in eleven to be general, but chiefly marked upon the right side, and in ten to be general, but better pronounced upon the left side. In thirty-two cases the affection was absolutely unilateral, being confined in twenty instances to the right side, and in twelve to the left.

The reports on chorea published at different times have varied greatly in regard to this point, but I am inclined to think that the more modern statistical accounts all point to the right side of the body as being the side especially liable to be affected. The present table agrees with the opinions expressed by such high authorities as Drs. Hughlings Jackson and James Russell, and it also coincides with the results obtained by me in 1874; but it is directly opposed to the statements of a number of French writers, among whom may be mentioned Rufz, Trousseau, and Sée.

A certain number of cases of chorea beginning unilaterally ultimately become bilateral; but by far the greater number remain so throughout the course of the attack. Another, though a very rare result, is the passage of the disorderly movements from one side of the body to the other; thus, for instance, converting a right-sided chorea into one of the left side.

In regard to the alleged *cause* of the disease, in twenty-two cases out of the whole number none was discovered. In eleven cases it was attributed to fright; to rheumatism without heart disease in eleven cases; to rheumatism with heart disease in seven cases; to heart disease alone in six cases, and in three cases, though no actual exciting cause was found, to a strong hereditary predisposition to chorea.

Out of the twenty remaining cases the disease was ascribed to violent pain in seven instances, and to mental worry and miscellaneous troubles in thirteen.

The relation between chorea and rheumatism,

or the rheumatic diathesis, and valvular disease of the heart has given rise to much discussion, and to the advancement of many theories. Dr. Mitchell has frequently at his clinics expressed the opinion that chorea and the rheumatism of childhood are of kindred parentage; in other words, the former is simply another expression of the causes which give rise to the latter, and though he does not deny that the disease is sometimes intimately related to heart disease through embolism, he still believes that the majority of cases are not all connected with such a pathological condition. A seemingly strong objection to this view is, that in most of the fatal cases where examinations have been made, vegetations have been found upon the valves of the heart. But in opposition to this it may be urged that possibly the cases associated with vegetations are the ones most likely to end fatally.

The doctrine of embolism as a cause of chorea was first announced by Kirkes, who held that whenever an association between chorea and rheumatism was found to exist, there had been an inflammation of the valves of the heart, and the association was not between chorea and rheumatism, but between chorea and valvular disease of the heart. That is to say, that vegetations formed upon the valves as a result of inflammation, and becoming detached, were washed into the general circulation, causing an irritation of the nerve centres. Dr. Kirkes did not attempt to localize the seat of the lesion, as has since been done by Dr. Hughlings Jackson, who, accepting the theory of embolism, maintains that it is the nerve tissue about the corpus striatum which is rendered unstable by plugging of the smaller branches of the middle cerebral artery. Dr. Jackson also insists upon a distinction being made between instability of nerve tissue and destruction of function; the result of the former being disorderly movements, and of the latter paralysis. This really places chorea on the border-land of paralysis, and the frequent mingling of both conditions unquestionably gives much support to the view.

Season of Year.—In my first paper, I stated that Dr. Mitchell had called attention to the fact that chorea, as it occurs in Philadelphia at least, is much more prevalent in the spring than at other seasons, and the analysis I made forcibly proved the correctness of the observation. Out of the eighty cases which form the basis of the present paper, the attacks occurred in the spring in thirty-nine instances; summer, ten; autumn, seven; winter, twelve; total, sixty-eight. In the twelve remaining cases the point is not mentioned. Thus it will be seen that more than half of the cases in which the point was noted occurred in the spring. It is difficult to offer any explanation for this remarkable preference, unless, as I before suggested, it is due to the enervating weather of the season in question. We all suffer more or less from constitutional depression in the spring, particularly in the early part; indeed the so-called "spring fever" has become with us an almost recognised disorder. I am not aware of any mention having been made of the point as it occurs in connection with chorea in other parts of our country. In Paris, however, according to M. See, the disease is most apt to occur in the autumn, the season which, I think, very closely resembles the spring of Philadelphia in point of temperature and tendency to cause enervation. The disposition of chorea to recur in the spring may also be shown. Thus, out of eighty cases previous attacks were noted in twenty-five, and all but seven of these occurred in the spring. Of the twenty-five cases, fourteen had had one previous attack, eight had had two, and in three instances the patients had suffered from three.

The presence of *partial paralysis* was noted in seventeen cases, the loss of power being confined in ten instances to the right side, and to the left in seven. The frequent occurrence of "choreic hemiplegia" is, as I have already said, a strong argument in favor of the view held by Dr. Jackson in regard to the seat of the lesion of the disease, viz., the convolutions about the corpus striatum.

In this connection I shall call attention to remarks made by Dr. Mitchell at his clinics in regard to the motor manifestations of certain choreas. For several years he has pointed out the existence of peculiarities in these manifestations which may be summed up as follows: Usually choreas begin with the exhibition of mere awkwardness of habitual voluntary acts,

and this increases until there is also added a new set of movements which in grave cases at last predominate. These are spontaneous meaningless motions, such as we all well know as choreic. In a certain number of the usual vernal cases, as well as in most of the post-paralytic choreas described by Dr. Mitchell, the second group of motor manifestations does not exist at all, or is seen in a minimum amount. That is to say, there is no disorderly movement except during an act of volition, when the amount of disturbance varies. In other words, as in some scleroses the hand when not in willed motion is quiet, but when moved by will trembles. So in these choreas, there may be no spasmodic acts until volitional motions are attempted, when these latter become at once irregular and inco-ordinate.

A third group is also to be found, but it is a smaller one. It is made up of children, who never have very severe chorea, but in whom it is constant and automatic, but ceases whenever a distinct purposive movement is made. Just as in paralysis agitans in its early stage, the tremor vanishes during a volitional movement, to recur when the part comes to a state of passive rest. As might be expected, the two last varieties of chorea are mixed together, so to speak, in variable proportions to form the first and more common class, but not rarely we meet with type cases of the other forms.

Dr. Mitchell has also noticed now and then at his clinics, and more often in private practice, cases of what may be called *painful chorea*. They are unilateral nearly always, and are accompanied with dull aches in the muscles and about the joints. He has never seen in them a distinct unilaterial outbreak of joint rheumatism, but still thinks that there is some reason to regard the pains as of rheumatic parentage. Dr. Mitchell has of late had reason to think that some cases of chorea are like the traumatic neuralgias, and certain examples of arthritis liable to be unfavourably affected by the atmospheric changes which herald a storm.

The *treatment* of most of the cases consisted in the administration of arsenic in increasing doses. Beginning with a few drops of Fowler's solution three times a day, it is our custom to increase the quantity by the addition of a drop to each dose on alternate days until a toxic impression is produced. When this occurs the dose is reduced to a few drops and again increased as before. In the more obstinate cases, many of which had resisted all other forms of treatment, the arsenic was pushed to its full toxic limit, that is, until decided puffiness of the face and gastro-intestinal irritation were produced. Fowler's solution was also in a few instances given hypodermically and with excellent results. The only advantage to be derived from this mode of administration is the lessening of the tendency of the drug to cause gastric disturbance—a complication which occasionally becomes an early obstacle to the treatment. We have also found that a much smaller and a less frequently administered dose is required to bring about the desired result of controlling the choreic movements.

Zinc in the form of sulphate was also employed in a number of cases, and with a result almost as good as that following the use of arsenic Other remedies employed were bromide of iron, gelseminum, eserina, cimicifuga, and bromide of potassium, but of these the bromide of iron was found to be the most efficient. Arsenic, however, is the drug in which we place most reliance. Dr. Mitchell indeed, believing, as I have already stated, that chorea and the rheumatism of childhood are of kindred parentage, has of late been using in rheumatism of the young full doses of arsenic, and even arsenic hypodermically. The results have been promising enough to justify the testing of this means by a larger experience. The rheumatic cases have been given arsenic up to the toxic limit, and until the face became swollen.

The results of treatment of the eighty cases were as follows: Cure in 56 cases; improvement or unknown in 24 cases.

All who have had experience in dispensary practice are aware that many cases fail to return to make a final report, and consequently the results cannot be positively stated. In the present instance, knowing that chorea when properly treated is a very curable disease, it is fair to assume that the majority of the cases marked "improvement or unknown" ultimately recovered.

TREATMENT OF ALBUMINURIA.

The *British Medical Journal* of June 3rd contains the "Croonian Lecture" of Dr. Dickinson on the pathology and relations of albuminuria, from which we extract the concluding paragraphs upon treatment :—"The disorders of the vital gland in question afford no exception to the rule that medicine must not be limited by the bounds of the materia medica. The circumstances of ordinary life, food, drink and temperature are to be considered as of the first importance; while the contents of the Pharmacopœia occupy the position of auxiliaries, whose services sometimes decide the battle, and at others are dispensed with without loss. Therapeutics to be successful must have a physiological basis. To give rest, as far as may be, to an inflamed structure is an old and sound maxim; and it is not less obvious in regard to the system at large that if a great channel of exit be obstructed the materials which therefore tend to accummulate should be sparingly introduced. The diet with albuminuria, save with that of lardaceous origin, in which the secreting power is until late little interfered with, while an exhausting discharge may have to be obviated, should be below the custom of health in its nitrogenous components. It may abound in milk and farinaceous matter, while fish may often take the place of flesh. The increase of albumen in the urine upon a too early resort to a meat-diet is a common experience. With regard to liquids, it can not be too strongly insisted upon that the functional strain upon the kidney is not to be measured by the quantity of water which filters through it, but by the quantity of refuse, mainly nitrogenous, which it has to convert and eliminate. Water, which probably transudes almost as through dead membranes, probably makes little demand upon the real secretive function. The worst kidneys, indeed, those most hopelessly incapable of their special work, will often discharge most of it; and it is easy to see that its passage, not to be regarded as the result of glandular effort, is salutary, both in the dilution of scanty and irritating urine, and also in washing out the solid products which, under the inflammatory process, collect mischievously in the tubes. A further use is to be discerned in this law. The solids of the urine vary with its water. With given kidneys the solid excreta wax and wane with the bulk of the urine. Any means, therefore, mere aqueous filtration as safely as any, which increase this will also magnify the components of the secretions which are essential to life. With tubal nephritis, therefore, and scanty urine an aqueous dietary, even with the addition of distilled water, or the elements in some slightly sophisticated shape, will prove in every sense beneficial. In many, perhaps in most, cases of nephritis of tubal origin, these remedies of patriarchal simplicity, "spare diet and spring water clear," are all that are needed to guide the disorder to its natural cure. To this surest and safest of diuretics, others must often be added, both to lessen dropsy and to avert the dangers of uræmia. The old rule is that in recent cases digitalis should be used. It seldom fails to increase the flow of urine; but I am not sure that it does not sometimes do so with some exasperation of the inflammatory action. The bitartrate and acetate of potash, which have a purgative as well as a diuretic action, may probably be safely resorted to; and in chronic cases as much as may be done harmlessly by diuretics may be accomplished by means of scoparium, nitre and juniper. Cantharides and the more irritating agents of this class are generally distinctly injurious. Perhaps, next to a regulation of the diet, it is most important to secure a daily and somewhat loose action of the bowels. Purgatives lessen the vascular tension, which in both acute and chronic cases is a measure of their danger; and while it is not advisable too largely to divert the urinary fluids by severe catharsis, increased hardness of the pulse, and other more obvious aggravations of the general state, seldom fail to ensue upon constipation. When cerebral uræmia is threatening hard purging by elaterium or otherwise is essential. As an habitual laxative a drug less used than it deserves to be, sulphate of potash, given two or three times a day in doses of from ten to twenty grains, is sometimes invaluable. It may be aided, if necessary, by Epsom salts or cream of tartar. This, or these, in their laxative action clear the obscured or blood-spotted retina and remove the

mists from the field of vision, slowly and not always completely, but in a manner which presents a remarkable contrast to the inutility of iron in this respect, and affords a testimony as to the use of alvine evacuations in lessening the arterial tension of which such lesions are the index. The chronic headache of the granular kidney is often similarly and equally relieved. While by such means the system is enabled to dispense, as far as may be, with renal function, it must be asked whether, particularly in circumstances of recent inflammation, any thing can be done directly toward the cure of the injured organ. Discarding counter-irritation as a method of punishing the skin for the errors of the organs which have no conscience to be touched by vicarious chastisements, it must be admitted that, beyond insuring sufficient irrigation of the tubes, our chief endeavor is to provide the gland with leisure to cure itself. But it is worth mention, in relation to a rapidly fatal form of nephritis, in which the tubes become widely sealed up as if with molten glass by a pseudo-croupous exudation of fibrin, the urine being almost suppressed, while the little that is passed is loaded, not only microscopically but as a bulky precipitate, with large fibrinous cylinders, that all plugging of the tubes from this cause can be prevented by alkalies. Alkaline urine is a solvent for fibrin, and with this in process of secretion the exudation retains its fluidity, and whatever harm it is capable of doing by solidifying in the tubes is obviated. The experiment is easy of trial. However numereus fibrinous casts may be, and I need not say that this term comprises all that are usually passed, they will, upon the alkalescence of the urine, quickly cease to appear, to return again with its acidity. There are cases in which such relief to the tubes must avert a pressing danger; but it is disappointing to recognize, as I fear we must, that the process of renal inflammation is seldom so simple as to admit of cure by this means. I may be permitted to say a word touching the use of iron. The impoverishing effect of albuminuria, possibly from the destructive action of the retained refuse upon the blood corpuscles, produces a pallor which can not but suggest this remedy; and in recovery from attacks of renal inflammation none is more hopeful. But a medicine which is effective for good is generally, and in somewhat the same measure, effective for harm; and iron in chronic albuminuria needs to be administered with more discrimination than it perhaps always receives. With high vascular tension, such as belongs to the granular kidney, with a hard pulse for its sign, an enlarged heart, retinal mischief, and possibly persistent headache and nausea as its concomitants, iron, however seemingly indicated by the look of the patient, is generally injurious, unless most guardfully anticipated and counterpoised by aperients. The perchloride, among other salts, is often of special service in dropsy; but where the vessels are not thus relieved, and the symptoms which threaten are uræmic, the drug is generally better withheld. In any condition it seldom fails to do harm, if allowed to constipate, a result which may be obviated by mixing the ferruginous salt with sulphate or bitartrate of potash.

"In the treatment of granulative or lingering nephritis, climate should take no secondary place. Every organ of the body, according to the teaching of ancient medicine, was subject to a separate planetary or celestial rule; a fancy which has at least this much of truth, that functional activity, and with it the liability to disease, are apportioned among the eliminating organs largely by external temperature or solar influence. In the tropics, the stress falls upon the skin and the liver; in the temperate zone, upon the lungs and the kidneys. The comparative exemption of the kidneys from disease, save of the lardaceous kind, appears, as far as our evidence goes—and the experience of our ubiquitous race makes it tolerably extensive—to be common to warmer latitudes; and the inference that, under the same atmospheric influence, chronic albuminuria, when not of lardaceous origin, would find perhaps not organic cure, but at least systematic relief, has been amply justified by recent experience.

"Not to dwell upon the treatment of cerebral uræmia, in which the uses of drastic purging and forced diaphoresis are sufficiently well known as lessening the uræmic state, while means of controlling nervous irritability, the bromides, chloral, and chloroform, are helpful as withholding its convulsive effects, I will say

a word upon the less trite topics, the prevention and possible cure of the lardaceous state. This condition is one in which medical treatment would seem to be suggested by the nature of the morbid change, and encouraged by a tendency to natural recovery which the disease, even in an advanced stage, will sometimes exhibit. But with the curative power inherent to the human frame, not in this case, however, so often successful as might be wished, comes the ever-present vice of therapeutics, the attributing to art what belongs to nature, a possibility of error which will probably never cease to increase the confidence of the confident practitioner, and the distrust of him who, in one sense more foolish, is wise enough to doubt.

"When the disease is consequent upon syphilis iodide of potassium is of marked effect in lessening the organic enlargement and ameliorating its other effects. Sometimes when a long-continued suppuration has come to an end, or greatly diminished, a retrogression in the resultant disease can be slowly followed, though no antidotal drugs have found place, if only the diet of the patient be liberal, and his general surroundings favorable to health. The special remedy which pathology suggests—one which of late years I have used often and largely—is potash. I have found, in the first place, that under lasting suppuration potash salts can be given, not only without the depressing effects which sometimes attend their use as medicine, but to the improvement of the general health, and with the absence of lardaceous symptoms, which, in the circumstances of the case, would be at least a pobable contingency.

"Further than this, I have given the salts of potash alone, or with quinine and iron, where visceral swelling, diarrhœa and albuminuria have betokened the disorder in an advanced shape. Under such treatment the liver and spleen have become measurably smaller, the urine less albuminous, the patient has gained flesh and weight, and all the symptoms have ameliorated. But chemicals put into the stomach are not brought to bear upon the tissues as if the treatment of disease were conducted in a test-tube, and the cure is at best a slow one. It is further obscured, or possibly simulated, by a shrinking, which the swollen organs sometimes naturally undertake.

"The most striking instance of recovery under treatment which has come under my notice was one in which the disease was associated with syphilis, and the treatment correspondingly modified. Great enlargement of the spleen and liver, albuminuria, diarrhœa, and emaciation, gave evidence of the disorder in a degree of seemingly hopeless severity. Iodide of potassium was given with potash and its vegetable salts. The patient was apparently cured.; and on his death from an accidental cause three years afterward the viscera were found to have returned to their natural size, and only such traces of the lardaceous change were discovered as to warrant the belief that he had once had more of it.

"On the whole, reviewing my experience in this matter, I must admit that the administration of potash by itself has proved, I will not say useless, but disappointing; less effective than pathological deduction would lead us to hope.

"As to the use of remedies of the restorative and tonic class, iron, quinine, and cod-liver oil, there is unequivocal evidence. If the deficiency of potash be connected, as I have ventured to surmise, with loss or insufficient development of leucocytes, the disorder may perhaps be more appropriately met by means which promote the formation of those essential instruments of nutrition rather than by the mere introduction of material which, in their deficiency, perhaps can not be turned to vital purpose.

"The measures I have commonly—and numerous experience justifies me in saying beneficially—used have been liberal diet, with beef-tea, Liebig's extract. and vegetables which abound in potash-salts, together with liquor potassæ, phosphate of potash, iron, quinine, and sometimes cod-liver oil. The alkaline remedies have been urged with the most obvious advantage during the persistence of suppuration.

"Nothing now remains for me to do but to thank this accomplished and critical audience for the forbearance with which they have listened to many tedious and possibly familiar details. I trust I have shown how the varieties

of renal disease are not only complicated, but often inextricable; but how, according to the bias which prevails in each instance, different classes of secondary results follow; that among these the cardio-vascular change, however else it may arise, is a result of the vascular tension of uræmia, which, though more common with some forms of disease than others, may ensue upon any. Finally, in touching upon treatment, I have sought to show in what instances it is to be guided by a consideration of the special organic state, and where more frequently by the results which it has produced upon the patient."—*Louisville Medical News.*

SCARLATINAL EAR DISEASE.

This subject is one of such constant interest that we quote from the Edinburgh *Medical Journal* the following remarks upon it, by Dr. J. P. Cassells, M.R.C.S. :—

Scarlatinal ear disease, the most destructive of all the ear diseases, and the one most frequently met with in general practice, arises out of the nasopharyngeal affection, which is so marked a complication of this exanthem. The propagation of this congestion along the Eustachian canal, into the cavity of the tympanum, and thence to the mastoid cells, must have been frequently witnessed, even by practitioners not specially interested in the practice of this department of our art. When this, the initial step in the causation of the ear disease, has taken place, its progress and development proceed with extraordinary rapidity. The Eustachian canal, as a result of this tumefaction of its tissues, becomes concentrically closed; in consequence, there is a rapid increase in the congestion of the tympanic lining membrane, owing to the disturbance which a closed Eustachian tube causes in the balance of the tympanic air-pressure. Inspection of the membrana tympani, at this stage, shows it to be, in general, unaffected by the congestion of the tympanic lining membrane. The temperature of the patient, at this period, is considerably increased toward evening, without a corresponding fall in it in the morning; there is much restlessness, rolling of the head, and more or less delirium, the general febrile attack. If now the interior of the ear is examined, the membrana tympa. being still unaffected, except in a very slight degree, by the general congestion, it is generally possible to recognise through it the deeply purple-coloured tympanic lining membrane. As yet, there is no effusion into the cavity of the middle ear, although its flow is imminent. Up to this point in the progress of the malady it is possible, by the timely use of the knife, to bring about resolution of the diseased action; failing in this favourable and more desirable termination, the certainty nevertheless remains, that by this means the disease is deprived of its power to commit damage. This stage in the treatment of the disease I call that of resolution and prevention.

The next step in the onward progress of the affection is most characteristic, is surrounded with more risk, and is of shorter duration than the preceding one; and because the resolution of the disease is no longer attainable, nor all the dangers to which it gives rise preventable as they were in the earlier stage, I have named it the stage of preservation or cure. It is now that, owing to a marked increase in the hyperæmia of the tissues, and a diminution of the support usually afforded to the engorged vessels, there takes place an exosmosis of serous-looking fluid, which speedily fills the tympanum and mastoid cells. The pressure from this accumulation, constantly increasing as the fluid becomes greater in quantity, causes, at last, ulcerative absorption of one or several points in the parietes of the tympanic cavity, or mastoid cells; a process, I may remark, that goes on with astonishing rapidity, and, as may readily be supposed, leads to serious consequences. Indeed, the future of the case is determined, in a great measure, by this process, and the nature of the tissue in which it is set up; if it is the membrana tympani alone that suffers from the destructive process, less danger, both present and prospective, is likely to follow, than where the bony wall is broken down or perforated. The general symptoms from which the patient snffers, in this stage of the disease, are much graver than in the former one; there is, usually, agonizing pain complained of in the intervals of freedom from this sympton; there is often wild delirium, and not seldom a state of coma,

generally out of proportion to the violence due to the pressure of the effusion upon the labyrinth. Pain, as a symptom, however, is not, by any means, a constant one; when it is present, it usually indicates periosteal or meningeal hyperæmia. If the membrane tympani is now inspected, it will be found no longer possible to see the purple-coloured lining membrane of the tympanum, by reason of the changes which have taken place in the membrana tympani itself. It is now of a bottlegreen colour, with more or less bulging outward; or it may assume a yellowish colour, if the contents of the tympanum have degenerated into pus.

It is in this stage of the disease that aural surgery, as a preservative, displays its advantages over the *laissez-faire* method of treatment. A free incision through the bulging membrane gives exit to the fluid, and arrests the destructive processes that may have set up in some vital part of the organ. On the other hand, when the nature of the case is unrecognised, nature relieves herself by discharging the pus (happily for the patient if it be through the membrana tympani), with no other damage to the organ, even though a life-long otorrhœa is the consequence.—*Canada Medical Record.*

The *Journal des Connoissances Médicales* contains a review of certain curious observations made by Dr. G. Esbach on the conformation of the fingers in various diseases. In persons that perspire easily, or in the case of disorders that induce profuse perspiration, such as rheumatism, typhus fever, &c., the transversal curvature of the nail is increased to exaggeration. This sympton, which scarcely ever fails to present itself in rheumatic subjects, has led Dr. Esbach to establish by a statistical method the sudoral etiology of that affection, and in the immense majority of cases he has found the following results :—A man who perspires easily, and who inhabits a ground floor, becomes sooner or later rheumatic; if, on the contrary, he lives in a dry apartment he is never troubled with that malady. On the other hand, a man who is not subject to perspiration may live in a damp room with impunity. Rheumatism appears thus to be placed on its real ground; dampness may be the cause of it, but only in such habits as perspire freely.

LIQUOR POTASSÆ IN DIPHTHERIA.

In a letter to the June number of the Boston *Journal of Chemistry*, Dr. Edward H. Sholl, of Gainesville, Alabama, says :—

Some five or more years since, my attention was called to an article on this subject in my weekly companion, the *Medical and Surgical Reporter*, of Philadelphia, by a physician of Philadelphia, whose name I do not now recall, directing attention to the use of the liquor potassæ in this disease.

Not satisfied with any treatment pursued in my practice prior to that time, the resolution was made to test this. An opportunity was soon afforded in a case of an adult male, and of extreme severity. To be certain, four physicians were called to examine and diagnose the case. All agreed as to its specific nature. For more than twenty-four hours the disease had been treated with iron, chlorate of potash, ammonia, etc., but the symptoms of debility, with local invasion of the throat, were rapidly increasing. All previous medication was suspended, and he was put upon the use of the liquor potassæ alone, in twenty-drop doses every three hours. In thirty-six hours every trace of the membranous deposit was gone, and the fever subsiding. The patient went on to speedy convalescence, and was soon able to leave my office, where I had kept him in order to conduct the experiment accurately. Since that time the remedy has been used, with like result, in every case of diphtheria coming under my care, and is given in doses suitable to age, every three hours. Usually, in the early stage, I alternate it with a four-ounce saturated solution of chlorate of potash, to which is added one fluid drachm of hydrochloric acid and two of tincture of iron, of which a small teaspoonful, properly diluted, may be given to a child six years old every three hours, allowing thus an hour and a half between the different medicines. When the membrane disappears, the iron mixture is discontinued, and an emulsion of cod-liver oil and syrup of lacto-phosphate of lime used till strength is restored. The liquor potassæ is continued as long as the membrane is present, and until the fever entirely gives way.

Materia Medica.

SALICIN AND SALICYLIC ACID IN RHEUMATISM.

The remedy of the hour in rheumatism is *salicylic acid.* Though now obtained by chemical synthesis, it exists in salicin, an alkaloid much employed by Southern surgeons during the war, in lieu of quinine.

On their comparative merits Dr. Maclagan says, in the *British Medical Journal:*—

As I am probably the only person who has experience of both salicin and salicylic acid in the treatment of acute rheumatism, perhaps I may be allowed space for a few remarks on the merits of these two remedies.

Which is the better remedy, salicin or salicylic acid? That each exercises a marvellous influence in cutting short an attack of acute rheumatism there can be no doubt. I have used salicin or salicylic acid in every case of acute rheumatism which has come under my care since November, 1874 (a year and a half), and invariably with the same result—a rapid cure of the disease. Seeing a patient suffering from acute rheumatism, I have no hesitation in assuring him that within forty-eight hours, possibly within twenty-four, he will be free from pain. That is a very different tale from any that can be told in connection with any other remedy.

Salicin is the remedy which I used first, but I have not confined myself to it. When salicylic acid was first recommended as a febrifuge, I determined to give it a trial in acute rheumatism. In the first case in which I used it, ten grains were ordered every two hours. On seeing the patient after four doses had been taken, the general condition was a little better, but she complained much of the medicine "burning her throat." I urged her to continue it. This she did, and on the following morning the pain was less, and the temperature had fallen from 102.3 to 101.1; but to the burning sensation in the throat was now added sickness. I omitted the salicylic acid, and gave the same dose of salicin, ten grains every two hours. The sickness ceased; the burning sensation in the throat disappeared; and by the following day the pain was entirely gone from the joint and the temperature had fallen to 98.8. She made a good recovery.

This case well exemplifies what is the chief objection to salicylic acid— its tendency to produce irritation of the throat and stomach. I may have been unfortunate in my experience, but in every case in which I have given it this irritation has been complained of. All writers on the subject agree in referring to this irritation as one of its unpleasant effects. The salicylate of soda seems to give rise to the same disagreeable symptom. Salicin, on the other hand, never gives rise to any unpleasant effects. I have prescribed it within the last year and a half in many different ailments, in doses ranging from five to thirty grains. I am probably within the mark when I say that I have thus given it to at least a hundred different people, and I cannot recall a single instance in which any disagreeable effect was produced.

I have myself taken (by way of experiment) three doses of sixty grains—one in the forenoon, one in the afternoon, and one at night—without experiencing the least discomfort; but the smallest pinch of salicylic acid produces in me a feeling of heat and irritation in the throat, while a dose of ten grains gives rise to gastric irritation and a most unpleasant burning sensation in the fauces.

Salicin is a pleasant bitter, and is best given mixed with a little water, flavored with syrup of orange if desired. In adequate dose, say fifteen grains every two hours, it cuts short an attack of rheumatic fever, without producing disagreeable effects. It should be continued in smaller doses during the first fortnight of convalescence.

As remedial agents in acute rheumatism, salicin and salicylic acid seem to be equally efficacious; but the former has the advantage of producing no unpleasant effects. In time, too, it is sure to be much cheaper, a matter of some importance with a large class of sufferers from rheumatism.—*Med. and Surg. Reporter.*

Dr. Bernard, formerly Mayor of Montreal, died lately in California, where he had gone to recruit his health.

Surgery.

A CLINICAL LECTURE ON THE IMMEDIATE APPLICATION OF THE PLASTIC DRESSING IN FRACTURES OF THE LOWER EXTREMITY.*

BY DAVID W. YANDELL, M.D.

Gentlemen: The other day, after I had dressed a fractured leg in your presence, a member of the class asked me, "*What was the best time to put up such fractures?*" My answer, you may remember, was, "*The earliest possible moment after the bone was broken. The sooner the better.*" And now, after weighing my experience in such cases as carefully as I am capable of doing, I wish to add this to my reply on that occasion: *Dress the fracture, if you can, on the spot.* Do not, if it can be avoided, have the patient moved a single foot from where he received the injury; for he can undergo no movement of the limb without augumenting his pain and increasing his risks.

A little while back a merchant of this city got a simple fracture of the bones of the leg. He was put in a spring waggon and started to his house. On the way the upper end of the tibia was thrust through the skin, and what, when he left his store, was a simple subcutaneous wound, had, before he reached his residence, been made an open wound and converted into a compound fracture. The second accident was worse than the first. I saw more than a score of times, during the late war, soldiers who were started to the rear with simple fractures of the lower extremity, who, when they reached the hospitals, had compound fractures. The jolting inseparable from the best managed transportation on wheels almost certainly gives rise to pain, which means, in almost every instance, additional injury to the soft parts, and, as I have just remarked, it is sometimes even sufficient to change a simple into a compound fracture. Carrying patients with broken legs on litters on men's shoulders is safer than on wheels, but this can not conveniently be done except for short distances: and no matter how carefully it may be executed, it is nevertheless obnoxious in some degree to the objections I have just named. And this, too, though the surgeon may himself superintend the transfer, and before undertaking it encase the injured limb in a temporary, or what has come to be known as a field dressing; for this dressing, however well applied, is after all but a make-shift—it gives pain and disturbs the fragments of bone while it is being put on, and does the same when it is taken off.

Some years ago, when my lamented colleague, Professor Bayless, was lecturing one day on the subject of fractures, I was called to see a negro man with a broken thigh. I remembered it was the hour for my friend's lecture. The patient, who wished to go to hospital, was only a few blocks from the University. I thought the case would be an agreeablo surprise to Dr. Bayless, and would serve better than diagrams or words to illustrate the subject of his lecture, and so after adjusting the fragments and applying a good field dressing to the limb, I placed the patient on a stretcher, and this on the shoulders of four stout men, and putting these under way, I accompanied the cortege to the lecture-room. When we took up our march, I must believe that the broken bone was well in place; but when we reached our destination, and removed the dressing, the extremities of the fractured femur were frightfully displaced, and the sufferings of the patient extreme. A part of both these features was due to the motion which is well nigh inseparable from every attempt to transfer persons with broken legs from one spot to another, and a part to the violent spasmodic action of the injured muscles which, primarily lacerated, were still further vexed by being still further disturbed.

So my injunction to you to-day is that if you would encounter a broken leg when the injury done is at the minimum, when in dressing it you would give least pain, and have it most in your power to avert inflammation and all the evils which journey in its train, you must do so on the spot where the accident has occurred, and as soon afterward as you can get to it. Every inch that a fractured leg is moved is hurtful; every moment lost before putting it up is injurious.

A man in the employ of the gas company

* Phonographically reported.

here sustained a fracture in the lower third of the leg, within a few feet of my office door. In less than forty minutes after, the plastic dressing was drying on the broken limb. Two hours later the patient was removed without the least suffering to his home, a mile away, and had he been accustomed to their use might have walked on crutches the next morning.

It will oftentimes happen, however, that the opportunity to act with the promptness I have advised is not afforded you. You may not see the fracture until after swelling has set in, and the limb has grown painful and red and hot. What then? Why, do just this: Put the fracture up as soon as you can get your dressing ready. Go to work then and there, and encase the limb in some form of fixed apparatus. It may be Paris plaster, or eggs and flour, or glue and zinc, or liquid glass, or shoemaker's paste; only let it be something plastic, and apply it instantly.

Those of you who have been following these lectures longest can not recall a single instance in which you ever saw me postpone dressing a fractured leg or thigh because of swelling in the parts. On the contrary, I have unvaryingly inculcated that swelling and pain are to be regarded as but so many additional reasons for fixing the limb—for rendering it immovable—for placing the fragments so that neither the movements of the patient nor spasms of the muscles can disturb them. Pain, as Mr. Hilton in his lectures on that subject has so well expressed it, is a monitor—*the* monitor, as he puts it; and here it clearly seems placed to warn the surgeon against further delay in fixing the limb, and so fixing it that displacement can by no possibility again occur. Nor is swelling to be regarded as much the inferior of pain itself as a monitor. The two speak the same language. If you are truly wise, you will heed alike the voice of both; their admonitions are the same—they are calls for rest; and I beg you to believe that the more quickly and the more perfectly you secure this, the more rapidly and the more completely will they quit the broken limb. Oftentimes the injury done to the soft parts by the ends of the bones being suddenly and violently displaced by muscular action, or by change in the position of the patient, gives rise to some of the greatest dangers which occur in fractures. Hence, the sooner you adjust the fragments, and the more securely you provide against their subsequent displacement, the better you will have treated the case. Let neither pain nor swelling deter you from dressing the limb at once. If you see the fracture first at night, I pray you wait not till morning to put it up. Don't trust to sand-bags, or pillows, or splints, or this or that other device, and finally take your leave, saying you will call in the morning. A sight of mischief may occur between midnight and sunrise.

Some years ago a pilot jumped from the hurricane deck of a burning steamboat at the wharf at St. Louis, on to the boiler deck of a boat lying alongside, and sustained a fracture of both bones of the leg. The limb was well put up in splints, and the patient brought by rail to his home in this city. Forty-eight hours after the accident, when I first saw him, the limb was much swollen and very painful. I applied the plastic dressing at once, and had the satisfaction, not only of relieving all suffering immediately, but also of saving a man of very feeble constitution from the long confinement inseparable from any other mode of treatment.

An old gentleman fell, one Tuesday, and broke the two bones of the right leg above their middle. A medical man dressed the parts in the usual way. Thirty-six hours after I found the limb hot, painful, and much swollen. Did I wait for these conditions to abate? Not a bit of it. I ripped up the wrappings in which the leg had been enveloped and put on the final and only dressing which is required in such cases. The next day the patient sat up, and on the following Sunday he went on crutches, with his foot in a sling, two hundred yards to church.

A lady trod on a bit of orange peel, fell and broke her femur in its upper fourth. My friend, Professor Bayless, who, though he reposed great trust in the plastic apparatus, preferred waiting the conventional fortnight for the swelling, and so forth, to subside, applied the long splint, and made the orthodox extension and counter-extension enjoined in such

cases. The limb swelled enormously, and the pain was extreme. At the end of three days of very great suffering, I saw the case with my colleague, and applied the plastic dressing while the patient was under chloroform. There was no more pain after that, and in a week the the lady could, when assisted, get on crutches and move about her room.

From that day, my lamented predecessor became a convert to the immediate application of the fixed apparatus, and among the last services it was my privilege to render him, when his failing health obliged him to abandon such work as called for much physical exertion, was putting up a broken thigh in one of his patients immediately after the accident happened. In that case there was no swelling; none had had time to occur, and the early application of the dressing had most certainly prevented swelling. In proof of this I need only refer you to my own experience in its use, and state that in all the cases in which I have applied it *I have never had occasion to remove it on account of swelling in a single one.* Many times when I have applied it to limbs already swollen, I have been obliged afterwards to open it and overlap the edges, or trim them down, in order to adapt the bandage to the shrunken condition of the parts. Nor is this my own observation alone. I may fairly say that it includes the experience of two surgeons very favourably known to you —Professor Cowling and Dr. Roberts, both of whom, former pupils and chiefs of this clinic, are now colleagues, and who, as I believe, have never dressed any fracture of either the leg or thigh by any other than the fixed apparatus. These gentlemen will tell you, as I have done, that when the plastic dressing is applied to a fracture before swelling occurs, none will occur; and that when it is applied after swelling has taken place, the swelling will begin at once to abate and soon disappear altogether.

Nor do these remarks apply alone to simple fractures of the lower extremity. They are equally true of compound fractures in this situation.

A boy, eleven years old, got a compound, comminuted fracture of the left tibia, just below the tubercle. The laceration of the soft parts was considerable. I picked out with my fingers a number of loose fragments of bone, brought the edges of the wound together, and three hours after the accident put the limb in the immovable apparatus. I then cut out a space sufficient to dress and watch the wound. In less than a week the lad went in a waggon, over a rough road, nine miles into the country. In nine weeks he walked into my office with a firm, smart step, and without the slightest shortening.

Three years ago, while Professor Cowling was serving his term at the hospital, Pat Stanton, whom you occasionally see at this clinic, got an extensive compound, comminuted fracture of the right leg. The contusion and laceration of the soft parts were simply frightful. The accident happened in this wise, and I mention it in order that you may the better appreciate the real magnitude of the injury. Stanton and a fellow labourer were engaged in lowering a lot of whisky from the street into a very deep cellar. Stanton's post was in the cellar. By some mismanagement one of the barrels rolled off the ways on which it had been placed, and fell a distance of twelve or eighteen feet on to Stanton's leg. Now, a barrel of whisky taken at stated periods, is one thing; but taken on a sudden, and on one's leg, is another and a very different thing. Stanton was removed to the hospital, where he was soon seen by Dr. Cowling; the internes in the meantime having decided that it was clearly a case for amputation. I was sent for, and when, after consultation, it was decided to attempt to save the leg, Stanton drew me near him, and in a feeble voice, for he was still suffering from shock, said: "Doctor, had you told me my leg had to come off, I should have asked you to put a pistol ball through my head, and let me go at once." The plastic dressing was used instead of either the knife or the pistol, and you may now see Stanton almost any day earning his living on two good legs as a street cleaner. I hope you will not encounter, indeed it would be difficult to conceive of, a more unpromising case than Stanton's, or one which put the fixed apparatus to a severer test. I am convinced that no other dressing could have secured the same happy result; and even this would, I believe, have failed had its application

been delayed for the ten or twelve days advised by some surgeons.

In 1870, when I had six years' less experience than I now have in the use of the plastic dressing, and when among surgeons generally there was less positive knowledge of the inestimable advantages of its immediate application, I stated* that if the bandages were cut throughout their entire length, as soon as dry, and their edges subsequently brought together either by additional strips or by loop-knots, the principal objection urged against this dressing, namely, that it may became too tight as the swelling augments, or too loose as the swelling subsides, would be obviated. This statement grew out of my respect for the opinions of my seniors rather than out of the teachings of my own experience; for at that very time I was unable to recall a single instance where the dressing once applied, before swelling had occurred, that it afterwards became necessary to remove it because of swelling. *A limb timely put up in the plastic apparatus will not swell.* This is my dictum to-day. Hence there will be no occasion to open the dressing in these cases. Where swelling already exists it may, on subsiding, leave the limb, as you have seen, so shrunken as to render it necessary to cut and refit the bandage; but it is in these cases and in these alone.

To conclude: What I wish to impress upon you to-day is, that the best time to dress these fractures is the first moment after they have been inflicted. Every moment of delay is hurtful. The best place is on the spot where they have occurred. Every inch the limb is moved is an injury; and finally, no dressing is comparable to the fixed dressing.—*American Practitioner.*

Tapping the Gall-Bladder.—Dr. E. L. Dixon (*The Practitioner*, April, 1876) reports a case in which the gall-bladder was tapped five times, not only with impunity, but with great relief to the patient, and a total of 87½ ounces of liquid was withdrawn. The cause of the distended condition of the gall-bladder was not clear during life, but was found after death to have been an occlusion of the common bile duct from malignant deposit.

* American Practitioner, July, 1870.

INTRA-CAPSULAR FRACTURE OF NECK OF FEMUR.

BY T. J. MAXWEAL, M.D., OLENA, ILLINOIS.

(Read before the Military Tract Medical Society, Jan. 11, 1876, at Galesburg, Ill.)

I wish to lay before this Society a single clinical observation upon a subject that Sir Astley Cooper put to rest more than half a century ago. I refer to the subject of fracture of the neck of the thigh bone within the capsular ligament. As my case, in its treatment and results, conflicts with the teaching and experience of the great master, I approach the subject with the most profound respect for his genius and great learning, and hope you will not think me presumptuous.

Sir Astley doomed every man and woman who should be so unfortunate as to suffer from a fracture within the capsular ligament of the femur to a life of halting and deformity. Indeed, such was his experience without exception, and such has been generally that of the profession since his time.

With these prefatory remarks, I proceed to give the history of a case that came under my observation, the method of treatment, and its results, together with some remarks on the subject.

Mrs. J. G——, æt. 50, on the morning of Jan. 14, 1871, slipped and fell upon the hard, icy ground while attempting to go up a short inclined plane, striking on the right hip. She said she felt somewhat stunned, but did not suspect any serious injury until she attempted to rise, and then discovered that she was unable to use her right leg. She immediately called for assistance, and was carried into the house and laid on a pallet on the floor, where I found her about one hour after the accident.

On examination, I found the foot of the injured side averted, lying on its outer edge. Free motion of the limb in every direction, rotation and flexion of the thigh upon the pelvis, could be accomplished without trouble or the application of much force, though with considerable pain to the patient. By measuring the limb from the anterior superior spinous process of the ilium to the interior malleolus,

it was discovered that the injured leg was fully one inch shorter than the other.

The leg could easily be extended to its full length, and on rotating a little in that position crepitation was developed. The lady was of thin, spare habit, and afforded an excellent opportunity for free examination about the articulation. I could grasp the trochanter major in its entire extent to the neck of the bone, and follow all its movements. There was but little swelling, and a moderate degree of pain on handling. One marked feature of the appearance and feel of the hip, was the flattening in the region of the trochanter major, which was in no way improved by extending the leg to its full length. Grasping the trochanter and rotating the leg showed that it did not describe the arc of a circle like the uninjured one, but rotated on its own axis, or nearly so. I applied Day's splint for fractures of the thigh. Had no trouble in getting the leg to its normal length; but that flattened condition of the trochanter was unchanged, and she complained of pain and uneasiness in the region of the hip and groin constantly.

I continued this appliance for ten days, and then determined to change, as it did not accomplish the purpose, that is, to keep the parts in coaptation.

Accordingly, the splint was removed, and the following treatment substituted: A pulley was fixed to the foot of the bed, and another to the side about the centre. The foot was elevated about nine inches on the front and about six on the back, and the front side of the head about three, so that the tendency of a person lying on the bed would be to slip to the head and back part. The patient was then placed in bed, and extension made by means of a weight attached to a cord passing over the pulley at the foot of the bed, and fastened to the ends of the adhesive straps which extended beyond the heel. These adhesive straps were applied to the whole length of the thigh and leg, and, of course, covered by a bandage from the toes to the body. The lateral extending bandage, about four inches wide, was then passed around the thigh close to the body, and fastened to a cord which was carried over the pulley at the side of the bed, to which was suspended a tin bucket for weights. Weights were gradually added to the bucket at the foot until the leg was brought and kept at its normal length, and the lateral extension was increased, until the trochanter major could be grasped by the hand and felt to be as prominent as that on the well side.

The weight required to accomplish extension was about twenty pounds. For lateral extension—to lift the trochanter from its position against the posterior lip of the acetabulum—about twelve or fourteen pounds.

As soon as the lower fragment was brought out to its proper position, all pain ceased, and was not afterwards complained of during the long term of confinement.

She remained in bed with this apparatus until the fourteenth day of March, just two months to a day from the date of injury. When it was removed, motion and adhesion of the part appeared perfect. The adhesive straps, by which extension was secured, caused some slight abrasions of the skin; the knee joint was swollen and painful, and it was several weeks before it resumed its functions so as to be useful.

The leg maintained its normal length at the time of the removal of the dressing, and the lady walks to-day with the least perceptible halt.

I claim no originality for this mode of treating this kind of fracture, as the plan was fully set forth and illustrated by a wood cut, in a late number of the *American Journal of Medical Sciences.*

I venture to ask, may it not be more the inability of the surgeon to maintain the fragments in coaptation—as Prof. Gross states that no means yet known to the profession accomplishes this perfectly—rather than a physiological impossibility for the parts to unite by bony union, as claimed by Sir Astley Cooper? Had I followed that great master in the treatment of my patient, she would have undoubtedly become a cripple, and gone halting the balance of her life.

I do not think it possible to have had as good results follow the first application in this case. If by this report I shall induce the members of this Society to investigate the subject, and prove it good or bad, my object will have been fully accomplished.—*Chicago Med. Journal & Examiner.*

NOTE ON TREATMENT OF SYPHILIS.

We are very quiet in the matter of news in the medical world here, and my letter must be of a rather more practical character than its immediate predecessors. The subject of syphilis has received a considerable stimulus from the recent discussion on it, and many are finding their impressions on the subject rendered more vivid thereby than they were before, even if there has been nothing actually new added to their stock of information. As an outcome of this discussion, the matter of the treatment of syphilis has been considered. It would seem that there is already a reaction going on in the opinion of the profession as to the respective merits of mercury and iodide of potassium in the treatment of the remoter outcomes of syphilitic infection. The steady, persistent administration of mercury, especially in the form of the solution of the perchloride, is found to produce excellent effects. Neither does it follow that the persistent exhibition of mercury should cause salivation, or other unpleasant consequences of a mercurial course. But in order to secure good effects without evil consequences, or, rather, to reduce the evil consequences to the minimum, it is found that several points are to be attended to.

The first of these is to remember that the action of the mercurial is to break down material, so that it is rendered capable of being removed by the absorbent action of the lymphatics. It is by such a process that syphilitic growths, and the stores of syphilitic material laid up in the connective tissue of the body, are removed. But the effects of the mercurial, though most acutely felt by such material, are not solely confined to them, but act upon all tissues. It is necessary, then, that instead of the plan of continued hungering with a mercurial course, an opposite system, of feeding the patient well, is to be followed. In order to obviate the destructive effects of the mercury when long continued, it is most desirable to combine with it iron in some form. The perchloride of iron goes well with the solution of the perchloride of mercury, say as ten drops of the former to thirty drops of the latter, three times every day, it being as well to give it after food, so that the two agents get thoroughly incorporated with the food. If there co-exist a cachectic condition, or the patient be worn out or anæmic, this combination renders it quite safe to push the mercurial freely, and that, too, without untoward consequences. If the nutrition be impaired, it is well to give also cod-liver oil. Such a mercurial course, so guarded and protected, may be continued for many months with the best effects. Since the adoption of this plan, the terrors of a mercurial course are greatly mitigated, in the writer's mind. For cachectic conditions, especially in middle-aged or elderly women, so common when the system is saturated with syphilis, and in children from a year or two old up to puberty, where a condition of arrested growth with distinct anæmia is so frequently found as the consequence of an inherited taint, such modified mercurial course is invaluable. It is no matter for surprise that when given alone, and freely pushed, mercury should produce baneful consequences in broken-down constitutions. But if given with the above auxiliaries, and with attentive watchfulness as to the requisites of each case, a course of mercury will often be found most beneficial, and at the same time not to be followed by unpleasant consequences. In cases of syphilitic eruptions, too, it is well to apply the mercurial locally. That is, instead of inunctious of mercurial ointment into the inside of the thigh and upper arm, it is well to rub the mercurial over the syphilitic part, and get the local advantages of the effect of the agent upon the new growths forming the eruptions. Whether mercury acts as a direct antagonist to the syphilitic poison, as the late Dr. Headland described it, or whether merely such growths as syphilis produces are more readily broken down and brought within the action of the absorbents than normal tissues, is practically immaterial. The explanation is quite subordinate to the clinical fact.—*London Letter to the Philadelphia Medical Times.*

Dr. A. Gamgee, F.R.S., Professor of Physiology, in Owen's College, Manchester, has in the press a treatise on the Physiological Chemistry of the Animal Body.

NOTE ON THE TREATMENT OF GLEET.

BY JOHN CHIENE, F.R.C.S., F.R.S.E.

Lecturer on Surgery, Assistant-Surgeon, Edinburgh Royal Infirmary.

Inflammation of the male urethra, the result of promiscuous sexual intercourse, is often a very intractable disease. This is specially true of the chronic stage of the affection. In no case can the duration of the disease be foretold; and frequently, even with the greatest care on the part of both patient and surgeon, the watery discharge may last for months, defying all forms of treatment.

Many reasons have been assigned for the tedious nature of the complaint; none are, to my mind, altogether satisfactory. A consideration of the natural history of balanitis, and of many cases of soft chancres with phymosis, in which opposition of the inflamed glans and inflamed prepuce is the sole cause of the persistent nature of the inflammation, must, I think, lead to the conclusion that the same cause may be at work in gleet. If such is the case, then separation of the surfaces of the urethra should, in cases due to this cause, be followed by a speedy cure.

I first thought of a flexible india rubber bougie, to be worn at night; but as this method hardly appeared suitable, I mentioned my difficulty to Dr. Cadell, of this city, who suggested a trial of clay earth, or kaolin, and directed my attention to a paper by Dr. F. W. Godon, in the American *Journal of Syphilography* for October, 1874. In this paper the good effects are attributed to the soothing and antiseptic properties of the clay, which is injected every four hours as a thick paste, and retained for a minute. If retained for some hours, then it would act mechanically, keeping the inflamed surfaces apart—acting, in fact, as a piece of lint in the cure of balanitis. It therefore seemed suitable for my purpose; and since the beginning of 1875 I have given it a trial in every case of gleet, after having satisfied myself that the discharge was not due to stricture. At first I used it only in intractable cases; latterly I have used it in every case of gonorrhœa after the acute state has subsided. The result has been satisfactory in the majority o cases. In some the rapidity of the cure has been very marked; in only one case has any evil consequence followed, the patient using an impure preparation, which hardened in the urethra, and was removed with difficulty. I have not used it in the acute stage of the disease, and have never injected more than sufficient to fill the urethra anterior to the triangular ligament. In those cases in which no good result has followed its use, I believe the source of the discharge was in the posterior part of the urethra.

It may, even in such cases, if sufficient quantity is injected to fill the whole urethra, do good, but I have always feared to use it in case some of the injection passed back into the bladder, and, being retained, might act as a nucleus for calculus. The fear may be groundless, but it has hitherto prevented me from adopting it. I beg, however, strongly to recommend it in gleet caused by inflammation of the anterior part of the urethra.

The kaolin is mixed with water, or with oil and water, so as to make a very thick paste, which is placed in the glass syringe, and injected very slowly into the urethra night and morning, after miturition; a piece of lint is then placed over the meatus, and the prepuce drawn forward to keep the lint in position. The kaolin at the meatus soon dries, and the plug of kaolin remains in the urethra. It is retained with difficulty during the day, but at night there is no difficulty if the case is chronic, and the injection be performed very gradually.

The good effects are undoubted: the true explanation of its action may be questioned. It may simply act as an antiseptic, as stated by Dr. Godon; in my opinion, however, there are some grounds for supposing that it acts mechanically. I have used it with great advantage in balanitis and in soft chancres with phymosis. Until something better is found, the use of clay-earth in keeping chronically inflamed surfaces separate is worthy of further trial.—*Medical Times and Gazette.*

PERSONAL.—Dr. C E. Taylor, a graduate of Toronto University, has settled in Clifton. We wish him success.

Midwifery.

EVACUATION OF THE UTERUS AFTER ABORTION.

Professor Alexander R. Simpson, in an interesting paper upon this subject, in the Edinburgh *Medical Journal*, May, 1876, rejects the use of instruments, and very sensibly urges the importance of using the fingers for intra-uterine work in securing complete delivery. He speaks as follows in regard to the methods of operating:

To begin with, the patient should, as a rule, be anæsthetized. The manipulations necessary to secure a satisfactory result cause suffering, though not to a great degree, which we can always save the patient by bringing her under the influence of chloroform. And at the same time that her sense of pain is abolished, her voluntary muscles are completely relaxed, and it becomes easy for the practitioner to press down the uterus through the abdominal parietes. I have often found myself baffled in the effort to reach the fundus uteri in such a patient until I had chloroformed her; for, however willing the woman may be to further your efforts for her delivery, involuntarily she contracts the recti abdominis when you make pressure on the hypogastrium, or withdraws herself when you press the other hand against the perinæum. The patient, then, having been anæsthetized, we may render the uterine cavity accessible to the exploring finger in one or other of two different ways.

First. We can push down the fundus uteri from above. The patient may lie either supine or in the ordinary obstetric position on her left side, with the knees drawn up; most frequently the right hand will be used for internal manipulation, while the left is applied to the abdominal surface. It rarely suffices to pass one finger alone into the vagina. In most cases the index and middle fingers are passed into the vagina, and while the middle finger is folded in the fornix to steady the uterus there, the forefinger is passed through the cervix. Or the middle finger can sometimes be more satisfactorily employed for the intra-uterine digitation, or, better still, both fingers may be passed into the uterine cavity. In the last case it may become necessary to have the other two fingers carried into the canal of the vagina, the thumb alone remaining external to the vulva. It is usually only in patients who have miscarried at the fourth month, or beyond it, that the hand requires to enter so far for the separation of the placenta, and then the vaginal cavity is relaxed and roomy enough easily to permit of it. Whilst the fingers of the right hand are thus seeking their way up to the recesses of the uterus, the left hand, applied above the brim of the pelvis, is pressing the uterus forcibly and steadily downwards into the pelvic cavity. In this way, in the great proportion of cases, we obtain perfect command of the uterine contents. The fingers of the two hands recognise each other through the double thickness of the abdominal and uterine parietes; and while the left hand keeps the fundus fixed firmly downwards, the forefinger of the right peels off the adherent mass and forces it through the cervical canal. In the great proportion of cases, I repeat, we can in this manner compel the evacuation of the uterus, and when it fails us our resources are not yet at an end; for,

Second. We can drag down the cervix from below. The first is the method that has most frequently been employed, and it has this in favour of its common employment that abortions are more frequent in multigravid than in primigravid women; in women, therefore, in whom there is usually a degree of abdominal relaxation, which greatly favours its execution. But where the walls are more resistant, or the patient is so fat that the combined external and internal manipulation fail us, then we must seize one or other of the lips of the uterus—usually the anterior—with a volsellum, double or triple-pronged, and slightly curved. One of the blades grasps the vaginal aspect of the front wall of the cervix as high up as the roof of the vagina, the other at a corresponding level within the cervical canal. The uterus is capable of being dragged far down without any injury to its ligaments or laceration in the bite of the volsellum. It may be pulled down with the right hand and kept fixed with it, whilst the fingers of the left pass into the cavity and explore and evacuate it. Or the volsellum may

be held in the left hand, or given to an assistant, to keep the uterus depressed, whilst the more familiar right-hand fingers do the intra-uterine work. The cavity of the uterus is thus brought within full reach of the fingers, and we can—and in all those cases of imperfect delivery in the early months we ought to—control the emptying of the cavity from fundus to os.

Whilst the method of gaining access to the interior of the uterus by pressing it down from above is that which has hitherto been ordinarily followed, my own experience leads me to expect that this second method, which I have just described, will largely supersede it. For, first, it is applicable in all cases where the other can be employed, and in some where the rival method is not available. Second, it is less painful, and may be carried out occasionally when there is not time for the administration of an anæsthetic. Third, it saves the expenditure of muscular power demanded of the practitioner, who presses and keeps the uterus pressed down from above only by overcoming the resistance of the abdominal walls. The one circumstance that will enable the bimanual method to hold its ground is, that we may find ourselves called on to clear out the uterus at a time when we have no volsellum at command, whilst our hands we always carry about with us.—*American Practitioner.*

Solubilities.—The following list gives approximately the number of grains of the salts mentioned, that can be readily dissolved in one ounce of water at the ordinary temperature. If this limit is much exceeded, a clear solution cannot be expected:

Potassium Iodide	500
Ammonium Bromide	300
Potassium Bromide	240
" Bicarbonate	120
" Nitrate	100
Sodium Borate	40
Potassium Chlorate	30
Mercury Bichloride	25

It should be remembered that the bulk of the solution exceeds that of the solvent; thus an ounce of water and an ounce of potassium iodide make about an ounce and a half of solution.—*St. Louis Clinical Record*, June, 1876.

TO PREVENT THE SECRETION OF MILK IN THE FEMALE BREAST.

I have for more than ten years employed the following method to prevent the secretion of milk in the breasts of women who may have had still-born children, or who, after having nursed their child for a few months, found it necessary to wean it. It is perfectly clean and painless as far as my experience goes, and as such I beg to recommend it to the notice of my medical brethren.

We will take, for instance, the case where the infant has been born at the full period, but is dead, or dies within a few hours of its birth. The milk makes its appearance in the breasts generally about the second day, sometimes longer, and sometimes it is ready when the child is born, and in the case of still-born children my experience leads me to think that in such cases it makes its appearance earlier than when the child is born alive. My plan consists in taking a piece of emplastrum adhæsivum of about ten inches square, round the corners, cut a hole in the centre for the nipple, then from the centre of each corner make a straight cut towards and within two inches of the centre hole; having now got it ready, let the patient lie on her back, her body being perfectly horizontal; warm the plaster and place it over the breast, then strap one of the lower corners down first, draw the opposite one tightly upwards and fix it in its place, then the other lower corner, and lastly the opposite upper one, having drawn it sufficiently tight first; now take a piece of plaster two inches wide and about sixteen or eighteen inches long and put it on from below and outside the breast, across close by inside of nipple, and fasten the end over the clavicle; another piece may also be put on in an opposite direction, it being drawn over the shoulder. Of course, in cutting the plaster and strips the size of the breasts must be taken into consideration, there being so much difference in the size of female breasts.

The above plan I always follow when one of my patients wishes to dry the milk, as they usually call it, or when they are compelled to do so either from the death of the child or any other cause. I also am certain strapping will prevent mammary abscess if resorted to in the earlier stage; I at least have found it do so in many cases.—*Dr. J. W. Lane, in Med. Press & Circular.*

TREATMENT OF PLACENTA PRÆVIA.

Dr. T. Gaillard Thomas, after narrating to the New York Obstetrical Society (*American Journal of Obstetrics*, Feb., 1876) the notes of a case of placenta prævia, made the following remarks. Is it better to allow a pregnancy, during which the woman has become exsanguinated and dangerously reduced by repeated hemorrhage from placenta prævia, to go on to term, or should premature labour be induced? He chooses the latter alternative, and has lost but one case of placenta prævia in which he brought on labour prematurely; the case died of post-partum hemorrhage. The children, of course, usually succumb. In the case just mentioned he detached the placenta (which was centrally inserted), cut the cord and removed it, leaving the child in the uterus; no hemorrhage occurred; twenty-four hours later the child was safely expelled. The uterus contracted well apparently, but three hours afterwards the family physician was hurriedly called and found the lady dying of hemorrhage. In his opinion the induction of premature labour offers greater safety, both to the mother and the child, than the plan of allowing the pregnancy to go on to term. The hemorrhage from this malposition of the placenta generally occurs suddenly, often at night, and before the physician can reach the patient she is beyond medical aid, or at least at the point of death. These repeated depletions also debilitate the child, and the question arises whether a child born prematurely at the eighth month is not fully as likely to live, or more so, than one weakened by repeated hemorrhages. If the labour is induced by rubber bags, the hemorrhage will be slight, and the danger to the mother not great, for these rubber dilators compress so thoroughly as to arrest the bleeding from the placenta during the dilatation of the os; of course the diagnosis should be correct, and a granular endocervicitis producing occasional discharge of blood should not be mistaken for placenta prævia. This method of treatment is not mentioned in the obstetrical text-books.

Albuminuria, after the external use of iodine, is said to be of common occurrence. *(Gazett. delle Cliniche.*

THE TREATMENT OF OVARIAN CYSTS BY ABDOMINO-VAGINAL DRAINAGE.

At the last meeting of the *Société de Chirurgie*, M. Delore presented a paper on a new method of treating ovarian cysts by abdomino-vaginal drainage. In a case of unilocular cyst this treatment has been completely successful. By means of repeated applications of caustics to the abdominal wall and to the posterior cul-de-sac of the vagina, continued until the cyst was opened, M. Delore succeeded in establishing a free communication by a drainage tube between the openings in the abdomen and vagina. The same operation was performed thirty years ago by Récamier, but without good results; Thomas, Peasley, and many others have punctured the vaginal cul-de-sac for the cure of ovarian cysts, but the novelty of M. Delore's treatment consists in opening the cyst per vaginam with caustics, and establishing a perfect drainage. At the discussion of the paper several objections to M. Delore's operation were raised. (1) The difficulty of applying the caustic in the posterior cul-de-sac. (2) The chance of finding a portion of the intestinal canal between the cul-de-sac and the cyst. (3) The time required for the applications of the caustic and the pain produced by it. Several ovariotomists further objected that every open tube introduced into the peritoneal cavity is an invitation to septicæmia, and pointed out that the great mortality in ovariotomy is chiefly due to septicæmic complications.—*Paris Letter London Examiner*, April 13, 1876.

Delivery of a Living Child from a Dead Mother.—Dr. Kelly (*Am. Jour. of Obstetrics*, Nov. 1875) reports a case in which a woman died in labor from rupture of a thoracic aneurism. The os was rapidly dilated, and a living child delivered in about fifteen minutes after the death of the mother. The child has since done well. Cases have been reported in which live children were born half an hour after the death of the mother.—*Clinic.*

Medical Jurisprudence.

"POST-MORTEM EXAMINATIONS."

The following are the deductions from Dr. Littlejohn's remarks on "Post Mortem-Examination (B. Internal Examination)" taken from his papers on Medical Jurisprudence, now being published in the Edinburgh *Medical Journal.*

"In this description of an ordinary *Medico-legal* dissection we have specially insisted,—

"1st. That the external examination should, in the first instance, be limited to the front of the body.

"2nd. That the organs of the chest and abdomen should be first exposed.

"3rd. That the heart should be carefully examined *in situ.*

"4th. That the inspection should then be proceeded with from above downwards.

"5th. That no hammer, or mallet, should be used in detaching the skull-cap (because, 'should the cause of death prove to be injury to the brain and fracture of the skull, this violent procedure must always leave us in doubt as to the exact causation of a fissure in the cranial bones).' 'We hold it to be essential that as little violence as possible be applied to the cranium in the separation of the skull-cap; and for the last 25 years have used with satisfaction and success the following adaptation of the ordinary chisel. A stout crosspiece of steel'—one end of which forms a screw-driver, for obvious uses, and the other a blunt hook to avoid the dangers arising from the use of the fingers in removing the calvarium—'is loosely fitted by an aperture (in the centre) to the chisel, and, gravitating by its weight, is arrested at the shoulder of the instrument, forming an ordinary cross where the two portions are adjusted. By sawing deeply over the frontal sinuses, the sharp end of the chisel is easily inserted, and by simply turning the chisel round, the internal table at once gives way with a slight crack, and the skull-cap is felt to be detached.')

"6th. That to enable us to form an estimate of the condition of deceased, as to sobriety at, or about, the time of death, and also as to his general habits, any serum in the ventricles of the brain should be preserved for the detection of alcohol, and portions of the heart, liver, and kidneys, submitted to microscopic examination.

"7th. In ordinary circumstances, where the dissection satisfactorily disposes of the case, it is not necessary to take the trouble of weighing the various organs where these present no unusual dimensions or appearance; and such phrases as *enlarged in size*, or *much enlarged*, etc., may be employed; but, in suspicious cases, remembering that our report must convey as much information as possible to those whose advice may be asked to support the allegations of a prisoner, the weight of the principal viscera, more especially of the heart, liver, spleen, and kidneys, must be given, should these not be described as normal; care being taken at the same time to indicate the size and configuration of the body of deceased.

"8th. When, after a searching examination, we have failed to ascertain the cause of death, our duty is plain. We seal up, and retain, the contents of the stomach and intestines, and we examine with the microscope the portions which we have removed from the heart, liver, and kidneys. These organs may prove to be so diseased as to enable us to advise the authorities that an analysis of the contents of the digestive canal is not necessary; but should the microscope give no positive indication of the presence of disease, then our report must be a negative one; and we place in the hands of the authorities the vessels, duly authenticated, in which we have secured the contents of the stomach and intestines."

At a meeting of the Medico-Chirurgical Society, at Edinburgh, on the 3rd of May, Dr. J. Batty Tuke, exhibited *a brain prepared by Charcot's process.* The brain to be preserved is steeped for six weeks in diluted nitric acid, and then allowed to dry. By this means it shrinks to about one-fourth of the natural size, but preserves most perfectly the anatomical relations. Professor Charcot uses such preparations as a means for recording lesions of the convolutions, instead of employing flat charts. Brain so prepared must also prove useful for teaching purposes.—*Edinburgh Medical Journal.*

Translations.

On Poisoning by Fungi.

We summarize, from the *Gazetta Medica Italiana*, a review and criticism of an oral communication made by Prof. Schiff to the *Società Medico-fisica*, of Florence, in May.

In the first place, Schiff calls to mind that in the last century and in the present, each fungus was supposed to have its own special poison; but all differences have been found to arise from the co-existence of other elements which have acted differently in different organisms, but *the* poisonous principle is the same in all. It was discovered by Schmeedberg in the *amanita muscaria*, and is called *muscarina*.

The symptoms are first increased salivation, due principally to increased secretion from the submaxillary gland, the parotid being less affected. This has been tested by experiments on cats and dogs, not on man or the ruminantia. It occurs even after division of the nerve trunk. It, at the same, time depresses the heart, making the pulse fuller and slower, though a small quantity will at first accelerate. It decreases the circulating pressure (at the surface), which seems to be due to dilatation of the small peripheral vessels. Respiration is more depressed according as the pulse is or not, although it does not bear a direct ratio. The abdominal secretions and intestinal movements are increased, the former phenomenon being shown by increased mucous secretions, sometimes tinged with blood; the latter, by direct inspection of the exposed viscera, and by abdominal auscultation. Contractile movements of the tail and other muscles sometimes occur, in these cases the heart is readily stopped by electric or mechanical irritation of the pneumogastric. Respiration is disturbed less by the fungi than by *muscarina* alone. So far the reviewer agrees pretty well with his author, but now the latter is quoted as saying:—

"With the poisonous fungi, when the stomach has not been promptly relieved by vomiting, besides the phenomena noted from the *muscarina*, there are some dependent on the central nervous system, on which it seems that *muscarina* does not exercise any direct action."

"In poisoning with the *amanita muscaria*, besides the symptoms described, there are restlessness of the animal, convulsions, which often seize on the muscles of respiration, dilatation, or on the contrary contraction of the pupil. In man, also, these phenomena have been observed, resembling those produced by opium or by morphia."

* * * * *

"There seems to be a very great analogy between the action of the Calabar bean and that of the poisonous fungi. But the Calabar bean, according to Schmeedberg, augments the sanguineous pressure, and according to the author, determines in a greater degree the contraction of the muscular fibres."

* * * * *

"The symptoms described are the opposite of those presented in poisoning by *atropine*, *daturin*, and certian *solanaceæ*. This antagonism denied by Rossbach, really exists, and the author has also made certain experiments to see whether the *solanaceæ* are antidotal to poisonous fungi."

The reporter then states that Prof. Schiff has made experiments on the lower animals by bringing them to the verge of death with fungi, and then restoring them with *datura stramonium* and *daturin*.

He has also proved by experiments on animals and on himself, that *daturin* produces certain cerebral phenomena analogous to the fungus poisons; but does not think these should stand in the way of using it as an antidote, inasmuch as these pass off of themselves, as soon as the danger from the action on the circulation and respiration are averted.

The editor of the *Gazetta* is astonished at the statement that poisonous fungi produce symptoms like opium and morphia, which, he says, is quite opposed to fact; on the contrary, he thinks opium and alcohol are the antidotes of the fungus-poison, and has published cases "by hundreds" in which cures have been thus effected.

He objects to the deductions drawn from the physiological action of poisons on the lower animals being hastily applied to man without further testing them, and refers to some unhappy results of this having been done. He also refers to the diverse action of certain poisons on different orders of animals.

A Case of Congenital Absence of the Kidney with Hypertrophy of the Heart.

The autopsy of a man twenty years of age, who died with symptoms of apoplexy, revealed hyperæmia of the dura mater, and a number of coagula at the base of the brain, particularly on the under surface of the pons and of the left fissure of Sylvius; also, coagulated blood in both lateral ventricles, particularly in the left. The brain substance around the left lateral ventricle was very much degenerated, and that in many places it had almost the consistence of thin gruel. The septum between the ventricles was perforated to the extent of about one and a half centimetres. The vessel from which the blood had been extravasated could not be found.

The left ventricle of the heart was enormously hypertrophied, its wall was two and a half centimetres thick, and the columnæ carneæ were also hypertrophied. The right kidney and infra-renal capsula were entirely absent, and in the place of the right renal artery there was found a rudimentary, solid band of connective tissue, and at the point where the band joined with the aorta, there existed a hard knot of what had the appearance of cicatricial tissue. The left kidney was normal. The hypertrophy of the heart and the extravasation of blood in the brain might be explained in this case by the absence of the kidney, as on this account the liquid was not separated from the blood in as large quantities as it should have been, which circumstance gives rise to an increased fullness and a greater distension of the aorta, and caused an increased amount of work for the heart.

This case seems to strengthen the hypothesis of Traube, that hypertrophy of the heart is a consequence of Bright's disease.—*Rundschau.*

Three Cases of Penetrating Wounds of the Abdomen, with Protrusion of the Omentum, are quoted by the same journal from the *Allgemeine Med. Central-Zeitung*, as recovering in Pirogoff's method, the omentum being left in the wound. Blinberg, who reports these cases tells of another in which the omentum was returned, and peritonitis and death resulted.

A Case of Lymphangitis Simulating Syphilis.

At the session of the 6th March of the Medico-Chirurgical society of Edinburgh, Dr. Francis Cadell related the particulars of a case of lymphangitis simulating syphilis. This case drew its principal interest from the great difficulty which was found in determining the syphilitic or non-syphilitic character of this affection. In June, 1875, three weeks after, a suspicious connection the patient, a man of thirty-three years of age, in good general health, felt in his prepuce a small knot the size of a grain of wheat. Five weeks afterward, when Dr. Cadell saw this patient for the first time, there was at the level of the preputical orifice a small knot containing a little pus, but not ulcerated, the lymphatics of the dorsum of penis, and the glands of inginual region were indurated. About the tenth week a second knot formed in the course of the lymphatic vessels, which were as large as crow-quills. A spontaneous opening caused a free flow of pus, which lasted until the fifth month of the disease, the patient's health, meanwhile, suffering to some extent. No syphilitic manifestation appeared, and now, at the 8th month, the induration has almost disappeared. Cases of this kind, carefully observed, furnish the best means of a scientific study of syphilis, and the diseases which resemble it. If, as Dr. Joseph Bell remarks, this patient had been treated by a physician convinced that mercury can prevent syphilitic symptoms, this physician would have here found an excellent proof of the virtue of medicine; but in this case the patient took no mercury.—(*Paris Medical*, June 1st).

A Simple Method of Extracting Foreign Bodies from the Œsophagus.

Dr. Edmond Le Bele proposes the following, which has enabled him to dislodge, twice from the same person, large bones in the œsophagus:—

A medium sized piece of iron wire is bent and twisted in itself, forming a loop at its lower end. The instrument is curved to suit the bucco-pharyngeal canal, and the looped end is guided by the finger down the posterior wall of the canal. When it meets the foreign body

it is pressed well back, and with a little jerk, is passed behind and below the body, the lower end of which becomes engaged in the loop. The body is then withdrawn by careful traction. The twisted wire occasions less inconvenience and resistance than forceps. (Bull. de la Société de Med. de la Lartho.)

INFECTION WITH VACCINE LYMPH, AND FATAL CONSEQUENCES.

On the 29th of March, 1874, eight dragoons of the Fifth Dragoon Regiment were vaccinated with lymph, procured from a foundling hospital near by. On two of the men the vaccination was not successful. The other six men became ill twenty-four hours afterwards, being seized with a chill, heavy fever, great weakness and delirium, and between the second and fourth day after the vaccination there appeared a phlegmonous inflammation of the arm, in some on one side and in others on both. And after a few days more, gangrene set in. Four of the men died and two recovered completely.

At the same time nine phials of lymph were taken from the same source, the foundling hospital, and used extensively, no bad results following its use. Whether the vaccinations were made with different instruments or not, is not stated.—*Rundschau.*

HYPODERMIC INJECTIONS OF COFFEE AND WHISKEY IN OPIUM POISONING.—Dr. John M. Flood, of Elmira, N.Y., reported the case of a patient who was so profoundly narcotized that, for a time, the respirations were but one per minute, and the pulse forty-two per minute. For the space of four hours the hypodermic syringe was constantly used injecting whiskey and coffee, and several times during the same period, tincture of belladonna was injected in doses of from ten to twenty drops. Success at length rewarded these measures. Probably more than two hundred injections of whiskey and coffee were administered in the space of four hours. — *Proceedings of the Chemung County Medical Society.—New York Medical Record*, May 20.

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Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, AUGUST, 1876.

INTERNATIONAL MEDICAL CONGRESS.

PHILADELPHIA, SEPTEMBER 4-9, 1876.

The International Medical Congress will be formally opened at noon, on Monday, the fourth day of September.

The sessions of the Congress and of its Sections will be held in the University of Pennsylvania, Locust and Thirty-four h Streets.

The General Meetings will be held daily, from 10 to 1 o'clock. The Sections will meet at 2 o'clock.

Luncheon for members of the Congress will be served daily in the University building from 1 to 2 o'clock.

On Wednesday evening, September 6th, Dr. J. J. Woodward, U. S. A., will address the Congress on the Scientific Work of the Surgeon-General's Bureau.

The Public Dinner of the Congress will be given on Thursday evening, September 7th, at 7 o'clock.

The Registration book will be open daily from Thursday, August 31st, to Saturday, September 2nd, inclusive, from 12 to 3 p.m., in the Hall of the College of Physicians, N. E. corner of Thirteenth and Locust Street, and at the University of Pennsylvania on Monday, September 4th, from 9 to 12 M., and daily thereafter from 9 to 10 A.M. Credentials must in every case be presented.

Letters addressed to the Members of the Congress, to the care of the College of Physicians, N. E. corner Locust and Thirteenth Streets, Philadelphia, during the week of meet-

ing will be delivered at the University of Pennsylvania.

The Secretaries of State and Territorial Medical Societies are requested to forward without delay to the Chairman of the Committee on Credentials, I. Minis Hays, M.D., 1607 Locust St., Philadelphia, lists of their duly accredited delegates to the Congress.

Delegates and visitors intending to attend the Congress are earnestly requested individually to notify immediately the same Committee.

This information is desired to facilitate registration, and to ensure proper accommodation for the Congress.

Members intending to participate in the Public (subscription) Dinner of the Congress will please notify the Secretary of the Committee on Entertainment, J. Ewing Mears, M.D., 1429 Walnut St., Philadelphia.

Gentlemen intending to make communications upon scientific subjects, or to participate in any of the debates, will please notify the Commission before the fifteenth of August.

University of Toronto.—Examiners in the Faculty of Medicine for 1877.—Physiology and Comparative Anatomy, C. Y. Moore, M.B.; Surgery and Anatomy, W. J. Wagner, M.B.; Medicine and Therapeutics, A. Beith, M.B.; Midwifery and Medical Jurisprudence, W. Forrest, B.A., M.D. *Medicine and Arts.*—Chmistry, R. A. Reeve, B.A., M.D.; Natural History, Prof. R. Ramsay Wright, M.A., B.Sc.

The Canadian Medical Mutual Benefit Association has elected the following officers for the ensuing year:—President, Dr. Hodder; Vice-Presidents, Dr. Canniff, Dr. Jas. H. Richardson; Sec.-Treas. Dr. Bridgman; Directors—Drs. Winstanley, Pyne, Agnew, Rosebrugh, De La Hooke, and Oldwright, of Toronto; Dr. Jukes, St. Catharines; Dr. Lander, London; and Dr. Henderson, Ottawa.

Canada Medical Surgical Journal.—Our Montreal contemporary has come out in a new dress. The leaves being cut is a great improvement, and the addition of a department of translations from foreign journals will be valued by all who interest themselves in the advance of medical science.

Communications.

To the Editor of the Canadian Journal of Medical Science.

HINTS ON THE USE OF ATROPINE.

BY R. A. REEVE, M.D.

Surgeon to Toronto Eye and Ear Infirmary, Ophthalmic Surgeon to Toronto General Hospital, &c.

As atropine is invaluable in ophthalmic practice, and, indeed, should be used much more largely than it is, it is highly desirable that its poisonous nature should not prevent its faithful application whenever indicated. Those who apply it constantly and in a great variety of cases, see its toxic effects so seldom, that it were a great pity to allow one instance of such, or even the occasional occurrence, to have undue weight. Every ophthalmic surgeon is compelled to put it into the hands of nurses and attendants, many of whom are ignorant or heedless. The rarity of misadventure, therefore, attests the immunity of patients when the drug is properly prescribed, but offers no palliation for its careless use.

These remarks have been prompted by the record of "*Atropia poisoning from the application of a solution to the Eye,*" by Dr. Nettleship, (*Brit. Med. Journal,* April 8, 1876).

A woman, æt 44, had a mild attack of iritis in one eye, and sol. Atropiæ sulph. grs. iv. ad. ℥j, was ordered Jan. 29, to be used several times a day. "This was repeated at her next visit, Feb. 2nd. She then did not come again till the 12th, when she excused her absence by saying that she had been ill with a bad 'bilious attack.' On further inquiry it transpired that the chief symptoms of this 'bilious attack' had been dryness of the mouth and throat, a sour taste in the mouth, dryness and burning in the stomach, repeated vomiting, and partial delirium. These symptoms had not entirely passed off, and she still had the dryness of the mouth, and sense of burning at the stomach. The drops had lasted since the former visit, she had been using them all the time, and the pupil of the inflamed eye had become widely dilated. There was no dilatation of the other pupil. The atropine was discontinued, and her disagreeable symptoms subsided in a few days."

We make no comments on this particular case, but venture to affirm that it were infin-

itely better for a few amongst the legion with iritis to have such a 'bilious attack,' and come out of it with a 'widely dilated pupil,' than to suffer the irreparable mischief that often ensues from closed pupil or adherent iris, owing to the non-use or inefficient application of a mydriatic. Too frequently in iritis a gr. $\frac{1}{4}$ or gr. $\frac{1}{2}$ ad. ʒj. solution is ordered once or twice a day, with little or no effect; instead of a 4 gr. sol., after the maxim, "get the pupil fully dilated and keep it so," even if the drops require to be used every hour for the first day or two.

There are some precautions that should be observed in prescribing atropine. "*Poison*" should be conspicuous on the label—fortunately druggists are now compelled to observe this point. Precise directions should be given how to apply the solution, and at what intervals. In adults, one drop at a time generally suffices, and the solution should be dropped into the conjunctival sac near the outer canthus. In cases of copious lachrymation, as in the strumous ophthalmia of children, two or three drops are necessary, because the strength is almost instantly reduced by the tears. The most thorough and merciful method of making the application (without anæsthetic) in infants and young children who resist, is to compress the head between one's knees as in a vice, the nurse having the patient on her lap and holding the hands. The eyelids can then be separated, or the upper lid drawn back with a small duck-bill speculum, or with the index finger, the end of which is placed against the free border so as to avoid everting the lid. The tears should then be wiped away or soaked up before putting in the drops. Again, it is much better to order the applications "every 2, 4, or 6 hours," *e.g.*, than to put the indefinite "three or four times a day." The *sulphate* of atropia should be used as it is very soluble, neutral, and unirritating, while the alkaloid is quite insoluble in water, and requires the addition of acid, spirits, &c., for solution.

To avoid danger and alarm, those concerned should be told the initial symptoms of poisoning by atropine, and how to act if they develop; and also its power of dilating the pupil, and, in strong solutions, of paralysing the accommodation, even through the medium of a soiled finger or handkerchief. The unpleasant dryness of the throat caused by repeated instillations of strong solutions, 2 or 4 gr. ad. ʒj., can be easily relieved by an occasional sip of an aqueous solution of glycerine, or of gum arabic with sugar, &c. The progress of cases under atropine treatment should be carefully watched, and patients requested to report at short intervals. Atropine is a very costly as well as poisonous drug, and economy, efficiency, and safety are gained by using some form of drop-tube, and prescribing but a small quantity of the solution at once, as decomposition readily occurs, and irritation is produced. In lieu of drop-tubes specially made, one can easily attach an artificial rubber teat to the end of a short piece of narrow glass tubing, first sealing the few tiny holes by lightly touching their edges with the point of a heated probe or wire. A quill, barrel-pen, brush, &c., are also made to do duty. To secure dilatation for ordinary ophthalmoscopic examinations it is unnecessary and improper to use a strong solution, which will keep the pupil dilated, and accommodation paralysed for days; gr. $\frac{1}{8}$ or $\frac{1}{4}$ ad. ʒj. suffices (2 or 4 drops of 4 gr. sol. ad. ʒj. aq.), and the pupil contracts in a few hours.

To the Editor of the Canadian Journal of Medical Science.

CASE OF RECURRENT APOPLEXY.

BY WILLIAM OLDRIGHT, M.A., M.D.

Sir,—Believing that the following will be of interest on account of the obscurity of the case at the outset, its melancholy clearing up at the end, and the post-mortem confirmation, I send it for publication.

I was called to see Mr. Pearly on Sunday morning. I found my friend, Dr. Bridgman, who had been summoned at the same time, already there. The symptoms, as described by the friendswere epilepti form, but the pulse was very slow, and *rather* full. During the day the patient's condition improved, and I had good hope that he would recover.

On the following morning he was not quite so well, temperature high, face somewhat flushed, pulse about 125, and a good deal of headache, especially in front part of head; would readily answer questions and converse, but appeared dull. On visiting him again, about 6 p.m., I was told that I had been sent for about

4:30, at which time he suddenly began to grow much worse, falling gradually into a state of *coma*. I remained with him, and the *coma* became rapidly more profound during the first twenty minutes of my stay; the face became purple, the veins of the head intensely engorged and the breathing stertorius. I took about a pint of blood from the arm, but he died in about half an hour after my arrival.

I had feared on the first day that the case might be one of those cases of apoplexy which Watson so well describes, where slight extravasation takes place, but is stopped by the clot plugging the bleeding orifice of the blood vessel, and in which the bleeding often recurs with fatal result.

The autopsy showed this to be the case; the left lateral ventricle was distended by a clot which, I think, would weigh two and a half ounces. The greater portion of it was soft, but imbedded in it at its anterior and inferior surface was a firmer clot about the size of a nutmeg which was difficult to break with the fingers, and which cut firmly with the knife. This was evidently the explanation of the slow, full pulse, and other phenomena of the first morning. The exact number of beats I cannot now remember, the case having occurred about three months ago, but it was not much over forty.

Traumatic Evisceration and Recovery.—The *Gaz. Med. Ital.* quotes from the *Montpetra Med.* a remarkable case. A young girl, aged 12, fell on a large bottle and caused a wound through the abdominal parieties and omentum. Part of the small intestine transverse colon and greater curvature of the stomach protruded. They were returned, but again and again forced out by vomiting. Injections of morphia were given, the wound stitched up, and pressure maintained. The colon had to be punctured in several places to relieve it of gas before it was returned. The wound healed in a fortnight.

The students of Paris are endeavouring to form a Scientific Association, found a library, &c. *(Paris Med.)*

Hospital Reports.

London Hospital.—Separation of Epiphysis of Anterior Inferior Spinous Process of Ilium by Muscular Action.

(Under the care of Mr. Maunder.)

For the following notes we are indebted to Mr. H. Habgood, house-surgeon.

William G——, aged eighteen, was admitted into the hospital on April the 5th. He stated that on the previous day, while running in a flat-race, he thought it necessary to "put on a spurt," and whilst doing so suddenly felt a sharp snap, followed by acute pain in the right groin, and accompanied by a sensation of "something being out of its place." He also found he could not advance his right foot another step, but being within a few feet of the winning-post he threw himself forwards, and, grasping it, saved himself from falling. He then found it impossible to stand upright without great pain in the right groin, which was somewhat relieved by resuming the stooping posture. He was carried off the field by his companions.

On admission the patient was found to be a strong, healthy-looking lad, with well-formed limbs, and exhibiting no evidence of bone or other disease. There was no history of syphilis, strumous disease, or rickets; and he had ten brothers and sisters who were all healthy. He was observed to lie flat on his back with the thighs extended and the right foot slightly averted. He could rotate the right thigh inwards or outwards, but with slight pain. There was total inability to flex the thigh upon the pelvis, and the attempt to do so caused great pain in the groin. A little fullness was evident in the position of the spinous processes, and the inferior spinous process (the attachment of the straight tendon of the rectus femoris muscle) was found to be detached and freely movable. Cartilaginous crepitus was very distinctly felt, both by the patient and the surgeon. This, and taking into consideration the patient's age —eighteen (the epiphysis unites with the rest of the bone at about the age of twenty-five)— led to the conclusion that it was a case of separation of the epiphysis. The patient was simply kept in bed, the thigh flexed in order to relax

the rectus femoris muscle, and a couple of pillows were placed under the knees.

April 21st.—All pain and crepitus on manipulation had disappeared, and patient could flex the thigh without discomfort.

April 25th.—Firm union had evidently taken place, and patient could walk about the wards with ease. Discharged.

The above case is very interesting on account of its extreme rarity.—*Lancet.*

ST. THOMAS'S HOSPITAL.—CONGENITAL CLEFT PALATE TREATED BY THE APPLICATION OF STRONG NITRIC ACID, AND WITHOUT OPERATION.

(Under the care of Mr. Francis Mason.)

Mr. Mason has at the present time under observation at this hospital several interesting cases of congenital cleft palate, which he is treating by the application of strong nitric acid alone, and consequently without the use of the knife. The ages of the patients vary from a few weeks to several years. Mr. Mason thinks that this method of affecting union is especially applicable to cases in which the cleft is of average extent, and even where the hard palate is partially implicated. In more severe instances the ordinary operation may be required. Mr. Mason finds that the application of the acid is attended with no pain or inconvenience whatever to the patient, and although the cure is more slowly accomplished, it has the advantage of being sure, and of completely closing the fissure in the most perfect manner, without the risk of the parts giving way, either wholly or partially, as too often happens after the usual operation of staphyloraphy. A further gain seems to be that the cases may be dealt with as out-patients, as in all the examples now under notice. Mr. Mason, after many trials, prefers the strong nitric acid to any other form of caustic. We shall continue to watch the progress of these cases, and give the results on a future occasion.—*Lancet.*

Subjects were so scarce last session in Edinburgh that twenty dissectors were allotted to each body, instead of ten as formerly.

Meetings of Medical Societies.

HALDIMAND MEDICAL ASSOCIATION, ANNUAL MEETING.

The annual meeting of the Haldimand Medical Association, was held in the Town Hall, Caledonia, on Monday, the 17th of July, when the following members were present:— Dr. McCargow, Caledonia, President; Dr. Davis, York, President; Dr. Hillyer, Caledonia, Secretary; Dr. Bethune, M. M. C., Mount Hope; Dr. Baxter, M.P.P., Cayuga; Dr. Dee, Tuscarora; Dr. Harrison, Selkirk; Dr. Jones, Hagarsville; Dr. Dillaburgh, Caledonia; and Dr. Burnburg; Dr. Henwood, of Brantford, M.M.C., for the Territorial Division, was also present, by special invitation.

The minutes of the preceding meeting having been read, and certain accounts presented and ordered to be paid, the Association proceeded to the election of officers, when it was—

Moved by Dr. Bethune, seconded by Dr. Baxter, That all the officers of last year be re-elected.—Carried.

Several members having expressed their pleasure at seeing the representative of the Territorial Division, Dr. Henwood, present, it was—

Moved by Dr. Davis, seconded by Dr. Bethune, That this Association has much pleasure in admitting Dr. Henwood as an honorary member, and that the Secretary record his name on the roll as such.—Carried.

Dr. Henwood acknowledged the compliment in a few well-timed remarks, and took the opportunity of thanking the members for their unanimous support of his candidature at the last Territorial Division election.

The following resolutions were then introduced, and elicited an animated discussion, in which Drs. Henwood, Bethune, Baxter, Davis, and others, took an eloquent part.

Resolved, That this Association considers that it would be to the interest of the profession and of the general public if the number of the representatives in the Medical Council were increased, and that with this object it would be desirable to have the Medical Act so amended as to enable each Territorial Division to return two members instead of one as heretofore.

Dr. Henwood in a very eloquent, forcible, and logical speech, laid before the Association the advantages and dis-advantages which might accrue from an increased representation, and concluded, upon the whole, that such a measure would be premature and impracticable at the present, the financial condition of the College not justifying the increased expenditure incident thereto.

Drs. Bethune, Baxter, and Davis, also expressing similar views, it was laid over for further consideration.

Resolved, That this Association views with sorrow and amazement the attempts of a certain influential journal to discourage the efforts of the profession to elevate the standard of medical education and to protect the public from the ignorance and rapacity of charlatanry, and desires to record its unqualified denunciation of such an unpatriotic course.

Several members spoke to this resolution, and generally expressed the view that altogether too much importance had been attached to the utterances of the sheet in question. That, already puffed up with an inordinate conceit of its powers, it was administering to a morbid vanity for medical men to notice publicly diatribes whose vulgar insolence was only equalled by their inpotence. It was then voted to be laid upon the table.

Moved by Dr. Davis, seconded by Dr. Harrison, *Resolved*, That as the Medical Profession of Ontario has no proper place for the meeting of its representatives, the Medical Council, that the Member for Haldimand, Dr. Baxter, be requested to bring before the Legislative Assembly the propriety and justice of assisting the profession in purchasing a suitable building for its meetings and examinations, which may hereafter be known as the College of Physicians and Surgeons of Ontario.—Carried.

The tariff for the Council, as revised by the Committee appointed at the last anuual meeting, having been brought forward and thoroughly discussed, it was—

Moved by Dr. Davis, seconded by Dr. Bethune, *Resolved*, That the Secretary be authorized to communicate with the President and Directors of the various Life Associations doing business in this region, that the members of the Haldimand Medical Association desire to express their opinion that the fee for examination of applicants for life assurance should be five dollars in all cases; the work of examination and writing being identical.—Carried.

At this period of the proceedings Dr. Jones, of Hagersville, preferred a charge of unprofessional conduct against a medical man resident in the same village, Dr. Dumble, who, it seems, had visited a patient of his suffering from a fracture of the femur, in his absence, and having taken off the bandage and splints, went through the process of re-setting when there was no displacement, re-adjusting his splints and re-bandaging the limb, with no other apparent object but to bring discredit upon his brother practitioner.

It was the unanimous opinion of the meeting that Dr. Dumble had been guilty of a gross breach of professional etiquette, and ungentlemanly conduct, but as he was not a member of the Association it had no power to deal with the case.

After the discussion of some other questions of general importance and partaking of a bounteous repast, served in his best style by mine host of the Diamond Hotel, it was—

Moved by Dr. Dee, seconded by Dr. Bethune, That this Association do now adjourn *sine die*.

P. S. Hillyer, M.D.,
Honorary Secretary.

Chromic Acid for Warts.—Three or four applications of this acid will cause the disappearance of warts, however large, hard or dense they may be. The application gives rise to neither pain, suppuration nor cicatrices, the sole inconvenience being the production of a dark brown color.—*Union Med.—Med. Times and Gazette.*

All the colleges in the Province of Nova Scotia, except Acadia, the Baptist institution, have agreed to affiliate with the new University of Halifax created by the Act of last session of the Local Legislature. Each of the colleges affiliating will nominate two members for the Senate of the University, and their students will go up for examination to the new institution.

Miscellaneous.

The Medical Profession of Toronto have decided to invite the Canadian Medical Association to an excursion to Couchiching.

Complimentary Supper to Dr. Bull.—Dr. Bull, of Weston, was entertained by a large number of gentlemen from Toronto, Weston and its surroundings, and South York, generally, on the occasion of his leaving Weston for European travel.

Orillia Asylum.—Dr. Wallace, of Spencerville has been appointed medical superintendent of the Orillia Asylum for the Insane. The idiots at present inmates of the various Asylums in Ontario, will now be removed to Orillia, and be replaced by a large number of lunatics at present committed to the Provincial gaols.

New Medical Journals.—The *Archives of Clinical Surgery*, published in New York, and edited by Dr. Bermingham, is a valuable addition to our periodical literature. It promises to deal with surgery in all its special branches, and advertises a list of influential and able contributors. *The Ohio Medical and Surgical Recorder* is the title of a new monthly published in Columbus, U.S. We wish the new journals every encouragement.

Toothache Remedy Mr. C. A. Guild writes to the *Clinic*: "I have found collodion mixed with enough carbolic acid to form a jelly-like mass to be an excellent remedy for toothache. About equal parts will form a 'stiff' jelly, which may be taken on the end of a pine stick and placed in the cavity of the aching tooth. The pain will be relieved almost instantly if it depends on an exposed nerve. I have found this the most reliable and convenient remedy I ever tried."

In a paper read at the Madrid Academy of Medicine, Dr. St. Martin, having examined into the condition of 551 infants resulting from 149 consanguineous marriages, comes to the conclusion that the belief which prevails of the danger of such marriages rests upon a very slender foundation. In support of this opinion the "Independencia Medica" states that at the Deaf and Dumb School at Barcelona there have been admitted 253 children during 31 years, and of these only 15 were the issue of consanguineous parents.

The Convention of the Medical Colleges of the United States was held on June 2nd and 3rd last, at which the following resolutions in regard to beneficiary scholarships were unanimously adopted:—*Whereas*, The practice of reducing or remitting in individual cases the established fees of a college has the objectionable feature of discriminating between students who may be equally deserving, and opening the door to possible gross abuses; therefore, *Resolved*, That this convention regards the above privilege as one to be deprecated in general, and if put into practice at all, to be exercised both rarely and reluctantly, and only in unusual circumstances, and after unsolicited application by proven deserving candidates. *Resolved*, That anything like a wholesale system of such reduction or remission of established fees, or *any open solicitation of recipients of such favors*, be regarded as in the highest degree improper, and that any college indulging in such practices deserves to forfeit its place on the *ad eundum* list of medical colleges.—Those who may be looking forward to have tickets or degrees recognized in other colleges would do well to keep this in mind.—*Louisville Medical News.*

Colour Cure for Insanity.—The theory that colours exert an influence on brain diseases is being practically tested in Italy, with most extraordinary results. A certain Dr. Ponza gives an account of some successful experiments recently tried upon lunatics at an asylum for the insane at Alessandria, Italy. The following instances were cited as illustrations of the treatment and its effects:—"A taciturn and melancholy lunatic, who rarely ate of his own accord, was made to lie down in a room with red glass windows and the walls painted red.

In three hours he was lively and gay and asked for food. Another patient was accustomed to pass the day with his hands contracted over his mouth, to keep out poisoned air. He lay down for a time in the same red room. The following day he ate heartily, and from that time forth was cured. A violent maniac, for whom a strait jacket was necessary, was kept in a room with blue glass and walls; in an hour he was much calmer. Another mad person was cured by being kept in a violet room. Dr. Ponza considers that the treatment might be applied in various cases of nerve-disease, such as chorea, hysteria, epilepsy, &c.; and he thinks the violet colour adapted to give the best results. It is known to have a very marked influence on animals and plants; the former fatten rapidly in violet light; and plants, under a cover of violet glass, grow with an unwonted vigour. Following P. Seechis' advice, Dr. Ponza constructs his coloured chambers with an eastern or southern exposure." These reports seem incredible, yet there is probably a foundation for them in the soothing influence on the brain and nervous system of subdued colours and softened lights.

Death of Stromeyer, of Hanover.—It is with much regret we record the sudden death of Stromeyer. On the morning of June 15 he rose in his usual health, and at ten was dead from apoplexy after a few minutes' illness. He died in harness, being actively occupied in his profession till the last. We do not at present propose reviewing Stromeyer's scientific life. Two years since, Stromeyer published, under the title of "Recollections of a German Surgeon," his autobiography. It created much interest and some controversy in Germany, yet appears to be unknown here. From beginning to end this book reads like a novel: is full of interesting details of places and men, the Danish wars, the overthrow of the King of Hanover, the last great war. Besides the details given concerning the teachers under whom Stromeyer himself studied in various German universities and in London, his own experiences as a professor are vividly set forth. Only in April last Stromeyer had all possible honours heaped upon him; and not the least, one may be sure, in his estimation was that offered to him by his English colleagues. The bust that it was decided to obtain is nearly ready, and is stated to be an excellent one. The Committee of the Stromeyer Testimonial purpose shortly issuing a final circular reporting their proceedings to the subscribers, and with this they promise to send an admirable photograph of Stromeyer, especially taken for the purpose. The first copy of this photograph, which is a splendid likeness, came to Mr. Mac Cormac from Miss Stromeyer, with the announcement of her father's sudden death, and stating that the last words he wrote were upon the back of the photograph. They were so admirable in their simplicity, so characteristic in their modesty, and under the circumstance so pathetic, that we gladly accept Mr. Mac Cormac's permission to publish them:

'My Dear Mac Cormac,—
You wished to see my photograph
Adorned with crosses and with stars,
The gift of emperors and kings.
It fades away; a marble bust
Will take its place in memory,
Shining in its simplicity.
There is no room for vanity
Amongst your peers of surgery.

Hanover, June, 1876, Marien Strasse, 8."

—*London Lancet.*

Births, Marriages, and Deaths.

BIRTHS.

At Peterboro', on the 13th inst., the wife of Dr. H. C. Burritt, of a daughter.

MARRIAGES.

On Tuesday, July 11th, at the residence of the bride's father, by the Rev. J. McAlpine, John Sinclair, M.D., St. Mary's, to Elizabeth, eldest daughter of W. Dale, Esq., Blanshard.

At the residence of the bride's father, on the 11th instant, by the Rev. Alexander Topp, D.D., of Knox church, Henry McLaren, to Sarah, third daughter of Dr. A. A. Riddel, Toronto.

At St. James' church, Kingston, on July 11th, by the Rev. F. W. Kirkpatrick, M.A., incumbent, Mr. Douglas Glass, Manager of the Bank of Montreal, Moncton, N.B., to Barbara, youngest daughter of Dr. Barker, Kingston.

DEATHS.

At Newcastle, on the 29th June, David Galbraith, F.R.C.S., Edinburgh; aged 67 years.

THE

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U. OGDEN, M.D., *EDITOR.*

R. ZIMMERMAN, M.B., L.R.C.P., London. *107 Church Street, Toronto, Corresponding Editor*

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☞ All Communications, Letters and Exchanges must be addressed to the Corresponding Editor,

TORONTO, SEPTEMBER, 1876.

Selections: Medicine.

ON INTERMITTENCY AND IRREGULARITY OF THE PULSE, AND ON PALPITATION, CARDIAC, AND AORTIC.

BY DR. GEORGE W. BALFOUR, EDINBURGH.

Irregularity of the pulse is most frequently associated with mitral stenosis or with gout; no doubt it is also associated with other cardiac affections, or with apparently simple dyspepsia, rarely, however, I think, unless these affections or dyspepsia be associated with the gouty dyscrasia. Simple intermittence, however, stands in a somewhat different category; sometimes it is only an early indication of failure of cardiac power dependent upon anæmia, overwork, or worry, or upon valvular disease or gout, but it is often a purely nervous phenomenon. In the former class of cases we have the affection commencing by an intermission, followed by a thump. As the disease progresses this thump becomes associated with a sensation of tumbling, and by-and-by the irregularity and inequality of the heart's action reveals itself to the sufferer by a rapid and irregular succession of thumps and tumbles of varying force. In the class of cases, however, to which I now refer, the disease never progresses beyond the thumping stage, and the thumps are not even very distinct; the patient has at the most an uncomfortable sensation in his cardiac region of varying intensity, lasting for less than a second, and if we happen to feel the pulse at that moment we become aware that this uncomfortable sensation is associated with the omission of a pulsation and nothing more; and sometimes this takes place regularly without the patient being in any respect conscious of it. Such cases are of purely nervous origin, and arise from sudden fright, grief, or anxiety; and the intermission thus produced, though for a time of frequent recurrence, gradually dies out, and sometimes disappears entirely, while in many cases it remains permanent, though much more infrequent than at first. This form of intermittence originates in the accidental coincidence of fright or anxiety with a heart congenitally or acquiredly feeble, or with a nervous system from similar causes unduly impressionable. I have known it commence with the shock of a railway accident, and in that case the intermissions were at first every second beat, but in a few months came down to one intermission in twenty beats, and I have no doubt will ultimately disappear. Richardson has known it follow a shipwreck in one instance, with a somewhat similar result, and sudden grief, anxiety, or anger, in several other cases.

This form of intermission is simply an exaggeration of what we have all probably felt at one time or other when our heart has, for the moment, stood still in the face of any impending danger to ourselves or others. It is merely an aggravated form of what our vernacular poet, James Smith, has so graphically described as indicative of maternal anxiety:—

> "My vera heart gaes, loup, loup,
> Fifty times a day."

This "loup" being nothing but the perceptible thump which succeeds a momentary intermission. In nervous, and therefore impres-

sionable individuals, now and then, there is no returning thump, the intermission, as Paddy would say, becomes permanent, and we have sudden death from emotional causes, of which not a few are upon record. At other times, partly from the intensity of the impression but chiefly from debility of the nervous system, this "loup," thump, or intermission, of which the loup is the most striking subjective symptom, not only occurs under the instantaneous excitement of any emotion, but repeats itself, at first at shorter, afterwards at longer intervals, until at length it dies out under the reassertion of the normal condition of the nervous system. Now and then, however, it never dies out, but repeats itself so long as life continues. We may, however, be permitted to doubt in such cases if the emotional excitement have any other connection with the intermittence except simply as the accidental incentive to a series of actions already from other causes about to begin. Be that as it may, however, the connection between emotional excitement and muscular motility of a convulsive and rhythmical character is not an unknown thing in other departments of medicine; and cardiac intermittence and irregular action from emotional causes, finds its counterpart in those imitative choreas and epilepsies, which are of no infrequent occurrence, and has even no very distant connection with the vagaries of the convulsionnaires and choreomaniacs of the Middle Ages.

In the treatment of intermittent or irregular pulse, we must be guided very much by the condition of the patient, and the existence of any actual cardiac disease, or of any irritation capable of reflexly producing such irregularities. And this we must carefully ascertain for ourselves, and never trust to the mere statements of the patient; because there is nothing more common than for a dyspeptic patient to say, "I never have a headache; I may eat and drink what I please, my stomach never troubles me." True, but his heart does; and careful examination will discover that his stomach is not so perfect as he represents it to be. It is precisely the same with him as with a patient with neuralgia of the shoulder-joint and a decayed molar-tooth. "You need not look there," he says, "I never have toothache." But he winces when we touch the tooth, and if we get leave to extract it his neuralgia is cured. The one man has toothache in his shoulder, the other dyspepsia in his heart. The cases are analogous, and teach us to put more faith in our own careful examination than in the statements of any patient, which, let me add, however, there is no need to contradict. We are bound to cure our patient if we can, but it would be both thankless and dangerous to attempt to confute all his prejudices.

In the intermittent pulse of infancy and childhood little treatment is required; the bowels must be regulated if necessary, but more by food and exercise than by medicine, for whatever enfeebles the frame tends to keep up the intermittence. We must also by moderate exercise in the open air, early hours, plenty of sleep, and the use of a nutritious but unstimulating diet, seek to tone down any nervous instability, and to develop a state of rude unconscious health. The patient ought also to be warmly clad, and the use of quite cold water as a bath avoided, as any nervous shock ought to be most carefully shunned. If any remedies seem needful, the bromide of iron is a very useful one, or in very irritable patients it may be necessary to have recourse to the bromide of potassium, for a time at least.

In patients affected with cardiac disease, we of course regard the irregular pulse as a mere symptom, and treat the central lesion upon which it depends whatever that may be. In by far the larger proportion of cases it will be found to be mitral stenosis, as I have already told you; and as the irregular action accompanying this lesion is merely a sign of cardiac debility, what we require to do in these cases is simply to slow and steady the heart's action, increasing at the same time the force of its muscular contractions. All this we can do most effectually by the judicious use of digitalis, so much so, that in a few days the patient will express himself as feeling a new man, and he will not much mind any little remains of irregularity, which it may be difficult if not impossible altogether to remove. Of course, though digitalis in small, repeated, tonic doses, must be our main stand-by in these cases, other drugs as subsidiary agents are frequently of great

importance, and must be used *pro re nata;* such as carbonate of ammonia, when bronchitic rhonchi are present; squill if there be much œdema—if only a little we may safely trust its removal to the digitalis; arsenic if there be much cardiac pain, which there seldom is in these cases; bromide of potassium, with or without morphia—subcutaneously or otherwise—if there be much nervous restlessness; and iron in some form or other if anæmia be a prevalent symptom.

When, however, intermittent or irregular cardiac action comes to be a subject for medical treatment apart from cardiac disease, the heart may still be soothed and steadied by small doses of digitalis if necessary, but the treatment falls mainly under three heads—*First*, to remove the cause if possible; *second*, to brace up the whole organism; and, *third*, to soothe the nervous system. If the cause be mental, such as grief or anxiety, all our care will frequently be baffled, and our success will usually depend not so much upon our remedies as upon our influence, and also upon the amount of mental firmness originally possessed by our patient, and whether he is still capable of being roused to exertion. In nervous shocks from anger or fright, we have a potent help in the narcotic needle, which timeously employed abbreviates the period of shock, and lessens its subsequent influence, besides giving the patient confidence in our resources and in their power to relieve him; the dose of morphia injected must, however, be a full one, and such as is sufficient to ensure sound sleep for some hours. We must in every case caution the patient against all depressing agencies, such as excess in venereal pleasure, excess in tobacco-smoking, too much work, especially intellectual work, all worry or excitement of any kind, and we must prescribe abundance of sleep, fresh country air, plenty of sunlight, perfect quiet, light amusing occupation, and nutritious diet in small quantities at regular intervals, suited to the requirements and capacities of our patient. But no solid food should be given at a less interval than four hours, so as to avoid introducing fresh food into a stomach still containing undigested material, as nothing is more injurious; but a tumblerful of hot water, or a large teacupful of hot solution of Liebig's extract of beef, washes out the stomach, prevents the accumulation of flatulence, and often proves most useful in stimulating the completion of digestion and the emptying of the stomach.

Alcohol is the one domestic remedy which exercises the most potent influence upon an irregular and intermittent heart; it is, however, one which must be used with caution, because excess in its use is apt to perpetuate and increase the very evil it is employed to cure. Still, moderately employed, its action is not only palliative, but to a certain extent curative; only it must be employed in moderate doses, and in those forms which contain fewest substances likely to disagree, and these are in the main good sound claret, and pure whisky free from fusel oil or all injurious impurity. Next to these comes sound sherry, neither too dry nor the reverse, but of medium quality. Porter, ale, and beer are useful enough at times, as well as all other alcoholic fluids, but as a rule are not to be commended, though in every case we must be guided by the idiosyncrasy, the purse, and the convenience of our patient. The object we seek to attain is to provide a nutritive, diffusible stimulant, slightly narcotic or sedative in its qualities, and one the components of which shall disturb digestion as little as possible, while we also take care that the quantity introduced shall not be sufficient materially to interfere in this way. About two ounces of absolute alcohol is the most that can be introduced into the system in one day without detriment, but this may be given in divided doses, and in various forms, according to the requirements of the patient. Coffee, but especially tea, are excessively injurious to such neurotic patients; they ought, therefore, to be avoided, and a French breakfast, with meat, fruit, and claret, will be found to suit such a patient much better than our ordinary one with tea for its principal beverage; but if preferred, hot soup with a little well-boiled rice will answer equally well in most cases. For lunch a tumblerful of milk and Carrara water, a glass of beer, or a basin of soup, according to taste. For dinner, plain roast or chop, vegetables in moderation, no pudding, and two or three glasses of claret, or

a couple of glasses of sherry, will be found very serviceable. No tea, and at night a glass of whisky and potass water, with or without a biscuit. This is a sort of model diet for such cases, which must be varied to suit each individual case. We must, especially in this climate, secure that whatever is taken in the morning be sufficiently stimulating to enable the patient to withstand the cold—especially in the winter—and to soothe him under the unavoidable worries of life. To this end, if soup be preferred for breakfast, a glass of sherry, or a tablespoonful of brandy stirred into the white of an egg previously dissolved in a little water with a pinch of sugar, will be found a most agreeable and useful lunch. What we must avoid is the production of a catarrhal condition of stomach, or its keeping up, if it already exist, as to that, more perhaps than to anything else, is due the persistence of intermittent cardiac action. But in these cases alcohol is really a remedial agent from which we can obtain more good than from any other drug, only it must be used as a drug, with caution. Definite rules only apply to definite cases, but there are three grand rules which apply to every case, and these are, that the alcohol must be given in a digestible as well as stimulating form, in divided doses throughout the day, and never in excess, otherwise we shall increase the evil we desire to cure.

What we desire to do in such cases is to brace up the general system, at the same time protecting it from injurious influences. Warm clothing, therefore, is a necessity, and cold sponging of the chest, especially every morning; but bathing, particularly sea-bathing, must be shunned as dangerous, the shock being only too apt to produce in such cases, spasm of the heart, cramp as it is so often called, which is so instantaneously fatal that the patient sinks, but is not drowned—he is dead before he sinks.

The drugs which will be found most useful vary with each case; pepsine in doses of 10 or 15 grains with each meal seems to do good always, but beyond that we must be guided by subsidiary symptoms. If there be much catarrhal irritation of the stomach, nitric or nitro-hydrochloric acid and calumba or quassia are often useful, soda, potass, or lime in the form of lime-water, often gives great relief, but never produces such a permanent effect as the acids; occasionally the alkaline treatment may be combined with the acid one with advantage, the acids being given before food, the alkaline from half an hour to an hour subsequent to a meal, and with these we may combine the use of podophylline in quarter grain doses, with a third of a grain of ipecacuan, and a quarter of a grain of belladonna, which in enfeebled patients unloads the liver, and relieves the right side of the heart without purging. If torpour of the liver be more marked, then small doses of blue pill and aloes just sufficient gently to move the bowels are most useful. If torpour of the colon be the chief apparent ailment, the long-continued use of Barbadoes aloes in small doses, with sulphate of iron, hyoscyamus, and nux vomica, answers very well; and if much flatulence be present, we may substitute a couple of grains of the compound galbanum pill for the hyoscyamus with advantage; or if gout be the fundamental ailment, then small doses of the ascetic extract of colchicum with Barbadoes aloes, both in such doses as shall insure no more than one stool a little more bulky or looser than usual, and continued daily or every second day for some time, will be found most useful.

When hæmatinic tonic is required, as will be the case in most instances, the citrate of quinine and iron will be found to be mildest, and the one most useful in all cases, while Easton's syrups of the phosphates of strychnine, quinine, and iron, is the most powerful, and if continued in drachm doses twice a day for several months, will often effect a most wonderful improvement in the patient's health, and in the state of his heart; that it may do so we must be careful to have all the catarrh of the stomach removed in the first place, and the liver also acting freely, otherwise this tonic will not only not do much good, but occasionally seems to do harm.

Whenever, from the state of the patient, and the defective excretion of urea, gout seems to be impending, the most important remedy will be found to be the free administration of colchichum along with alkalies.

Although for temporary purposes there is no

sedative equal to the subcutaneous injection of Squire's solution of the bimeconate of morphia, yet for continuous use as a nervine sedative bromide of potassium far surpasses it, but it must be given in full doses, from half a drachm to a drachm three times a day, till its full sedative effect is secured.

You will see then, that for the relief of intermittent and irregular cardiac action, we must endeavour first to determine the lesion upon which it depends, cardiac or otherwise, and we must treat this with due regard to the organic debility to which that lesion owes its injurious efficiency, and we must meanwhile not forget that between the cause and its effect we have the nervous system as a connecting link, and that by modifying or interrupting this connection, which we often can do by the judicious use of sedatives and narcotics of various kinds, we may cause to cease, or at all events mitigate the results pending our attempts at cure.

Cardiac palpitation is only too frequently dependent upon similar causes as irregular action, and is to be treated accordingly, especially by such means as shall restore a normal tone to the heart and to the organism generally. Now and then, however, an apparently accidental though violent attack of palpitation seems dependent upon acidity of the stomach, and can often be at once relieved by an antacid draught of soda, potass, or ammonia ; and indeed not only palpitation, but also some of the minor forms of irregular action are promptly relieved by a draught containing a drachm of aromatic spirits of ammonia, with or without an equal quantity of tincture of valerian, or failing that, by a tablespoonful of whisky or brandy, with a teaspoonful of carbonate of soda, in about a wineglassful of water, just enough not wholly to drown the miller, as we say in Scotland.

Epigastric pulsation depending on irritability of the abdominal aorta is a local neurosis not always apparently dependent on dyspepsia, nor to be relieved by tonics. I have, however, found it almost invariably to yield to full doses of the bromide of potassium in some bitter infusion such as calumba, gentian, or chiretta. The only exception to this that I remember seeing was that of a woman, in whom this excessive abdominal pulsation was accompanied by a preternatural hardness of that part of the artery, probably due to atheromatous disease and in her case large doses of the iodide of potassium gave great relief, though nothing had any permanently curative effect.

In connection with the subject of increased cardiac action generally, I may mention, that while increased action is liable to follow any unusual exertion. such as climbing a stair or going up a hill, both in hearts valvularly diseased and also in those which are simply weak, palpitation or irregular action occurring while the patient is at rest is by no means to be regarded as a certain symtom that a heart is only weak or gouty, because of course hearts valvularly diseased are always weak, and often gouty; and therefore liable to present the symptoms of both diseased and also of simply feeble hearts. There is, however, one peculiarity by which the valvularly diseased heart may be perfectly discriminated from a simply weak heart, and that is, that while palpitation or cardiac discomfort occurring as the result of exertion in a heart valvularly diseased can never be relieved by anything but rest, the same results following exertion in the feeble heart of a nervous or gouty individual are frequently calmed down by an emotional excitement, especially of a pleasurable kind, such as meeting a friend, or the sight of anything novel or attractive, or even, strange to say, by a more violent exertion. Thus a man with a heart merely valvularly diseased is not likely to have any discomfort unless he meets with a slight ascent in his walk, when he is at once brought up, and must rest ; but a man with a gouty or feeble heart, though he too may be " afraid of that which is high," and may also suffer during the ascent, yet has his palpitation at once relieved by any emotional excitement, and if he be seized with sudden palpitation while walking slowly on the level, he will often find it disappear at once if he takes a short race to the next lamp-post : the heart beats the faster for the exertion, but the palpitation is gone, affording an example of a very peculiar form of inhibition, which probably only those can truly appreciate who have experienced it.—*Edinburgh Medical Journal.*

TREATMENT OF SUNSTROKE BY THE SUBCUTANEOUS INJECTION OF QUININE.

BY SURGEON A. R. HALL.

Army Medical Department.

The experience of several medical officers in India is now apparently sufficient to prove that the hypodermic injection of quinine in heat apoplexy is the the most successful method of treatment that has yet been adopted. I have had conversations with several who have used it; and a friend of mine, a Surgeon-Major, recently returned home, said to me:—"If there is anything in the practice of medicine which may be described as *magical*, it is the effect of the subcutaneous injection of quinine in sunstroke." Records of a good many recoveries have been published; but as a typical case, I select the following one recorded by Surgeon-Major T. C. O'Leary, M.B., Royal Horse Artillery, in the "Annual Medical Report of the Army for the year 1872." As I presume most of the readers of the *Practitioner* do not see this blue-book, I insert the case here in full:—

"A man of the D brigade, Royal Horse Artillery, was, with others, unavoidably exposed in shifting baggage at the break formed by the Kistna river, on the line between the Madras and Bombay Presidencies. He was young, healthy, and had not been drinking. The train was about to start at three o'clock in the afternoon, from Raichare, when he staggered up to the carriage set apart for the sick, and asked for admission, saying 'he was dying.' The bell had rung, and no time was to be lost. The water chatties were filled, a lump of ice procured, and the two medical officers accompanying the Brigade entered the carriage with him. The cold douche was assiduously employed, ice was applied at the nape, and friction of the limbs kept up. Though the temperature of the surface was brought to its natural standard, the patient was making no rally, and the heart's action was rapidly failing. Stimulants could with much difficulty be administered, as the jaws were firmly closed, and complete insensibility was almost established; in short, the case was becoming desperate.

"Quinine had been constantly recommended in cases of this nature, and, as a syringe was at hand, it was determined to introduce the drug subcutaneously. The effect was closely watched, and after the first injection the pulse at the wrist was felt to flicker; this encouraged a further trial, and the result was so satisfactory that a third injection was accomplished. Within a few minutes the circulation was fully established, the man sat up, stared vacantly about, and recognized those standing near.

"It is only necessary to add, that within half an hour from the time when the first injection took place the patient was partaking of mutton broth, and was partly feeding himself. He soon fell into so comfortable a sleep that the medical officers were at liberty to leave him, and on the arrival of the train, at seven o'clock in the evening, at Goolburga, he was practically convalescent. On reaching Kirkee next morning he jumped out of the hospital carriage, and would have marched to barracks had he been permitted.

"The jolting of the carriage did not permit a nice calculation to be made of the quantity of quinine introduced at each injection, but the apothecary was of opinion that five grains in all must have been passed under the skin. No ulceration took place at the points of entrance of the needles."

During the month of May, 1869, my friend, Mr. Walter Kerr Waller, of Calcutta, told me that he had been very successful in treating sunstroke by doses of 20 or 30 grains of quinine given by the stomach, and advised me to try it. A short time afterwards, I was called to see a driver of my battery, at Barrackpore, near Calcutta, who was a patient in hospital, and who was knocked down with heat apoplexy about five o'clock in the afternoon. I found him completely comatose, with dilated pupils, stertorous breathing, face very much flushed, skin of body red and *burning hot*, pulse full and rapid. I dissolved 20 grains of quinine in 20 minims of dilute sulphuric acid, and about 3 ozs. of water, and attempted to make him swallow it; but in vain. I therefore thought it a good opportunity for trying the hypodermic method.

A solution of 5 grains of quinine in 5 minims

of dilute sulphuric acid, and 50 minims of water, was put under his skin, in different places, about the shoulders. Within one hour the heat of surface had perceptibly decreased; he steadily improved during the night, was quite sensible next morning, and recovered without any bad symptoms. As far as I am aware, this was the first case in which quinine was *hypodermically* employed. Surgeon J. Anderson, at present with the "Chestnut troop" of Royal Horse Artillery, shortly afterwards, in the same hospital, treated a case with equally satisfactory results. I attended five cases of heat apoplexy at Barrackpore, and employed this method, and they all recovered.

Now, as to the condition of the patient, and the way in which the remedy acts. Heat, at first, acts as a stimulant on the vaso-motor centres, causing the heart to beat more forcibly and rapidly. But after a long time, the over-stimulated centres become exhausted; then the capillary vessels are dilated fully. This condition is now generally recognized as one of real debility. A writer in the *Lancet* of February 3, 1872, under the head of "Therapeutic Traditions," remarks :—"For the old idea, that sensible heat of skin with redness of the face in itself implies strength of constitution, no authority remains; the obvious fact being that surface redness means *vaso-motor paralysis*." One prominent symptom is noticed in heat apoplexy; that with increased amount of blood in the skin, there is entire suppression of *perspiration*. The sudoriparous glands have apparently lost their power of action. I have an idea that the pathological conditions of heat apoplexy, and the *secondary fever* of cholera are very like one another, each a state of exhaustion, the consequence of previous stimulation, and that in both these states stimulants and quinine do good.—*Practitioner*.

Sir William Fergusson and Dr. Arthur Farre.—We are happy to be able to report that Sir William Fergusson continues to improve and to regain strength. He drives out daily, and at the end of the month he will go to his home in Scotland. We are very glad to say also that Dr. Farre is making very favourable progress towards recovery.

DEATH FROM RUPTURE OF A VERY SMALL INTRA-THORACIC ANEURISM.

BY JOHN C. THOROWGOOD, M.D., F.R.C.P.,

Physician to Victoria-park Hospital for Diseases of the Chest; Lecturer on Materia Medica at Middlesex Hospital.

Mr. T. H., aged forty-two years, whom I had known for some five years as a dentist rising into considerable practice, came to me one morning in April last, complaining of very severe pain whenever he swallowed food. The seat of the pain appeared to be about the cardiac orifice of the stomach, and as soon as the morsel swallowed had entered the stomach the pain ceased.

The only ailment for which I had been called in before had been obstinate pains, like those of rheumatism, about the body generally, associated with profuse night-sweats. Of late the health had been remarkably good, and flesh had been gained to some extent. So little importance did the patient attach to the pain on swallowing food, that he was contemplating an excursion into the country on the very day on which I was consulted; but from this intention I dissuaded him. It was about April 16 when I saw him for the symptom just alluded to, and at that time the pulse was 96, tongue clean, spirits good. Careful examination showed some little increase of hepatic dullness towards left; no cardiac murmur, but second sound seemed unduly loud; no cough; breath-sounds normal; no vomiting; bowels open. Patient told me that some years ago he had had a similar attack of pain in swallowing, attributed to congestion of liver, which in a few days passed away. I prescribed a powder of hydrargyrum c. cretâ and pulv. ipecac. co. at bed-time, and an antacid laxative mixture. Three days later he was no better. The pulse was small; at one time it would be 96, and six hours later would fall to 72 or thereabouts. A motion from the bowels was described to me as inky black. These symptoms alarmed me more than they seemed to do my patient, but he promised to rest and take the dose of tincture of opium which I ordered. Nothing new in the way of physical signs.

On April 21, at 9.30 a.m., just as I was leaving for a distant visit to the country, my poor

friend came to me in much suffering. The pulse was 96. Tongue clean. Bowels loose, but motions not unhealthy in appearance The pain was now complained of in the back and under the right shoulder. Feeling very uneasy about him, I recommended him at once to see Dr. Andrew, who made a careful examination, and detected a murmur audible below the xiphoid cartilage, and so down to umbilicus, where it ceased. Later in the day this murmur could not be heard.

Towards the evening of Friday, April 21, the suffering of the patient increased fearfully; and Mr. Maunder, who was called in, injected one-fourth of a grain of acetate of morphia into the tissue of the arm. After this a short mitigation of pain took place, with a sensation as if something had given way in the chest; and presently great collapse came on, relieved for a time by an injection of brandy into the rectum, but ultimately fatal at 9.30 p.m., on the 21st.

Dr. Andrew was of opinion that death was due to the rupture of an aneurism. The correctness of this opinion was proved by the post-mortem examination made by Dr. Andrew, Mr. Maunder, and myself on the 23rd.

On opening the abdomen we found nothing worthy of remark; but, on proceeding to open the thorax, blood-stained fluid ran out from the right pleural cavity, and from this cavity was removed a large quantity of this bloody fluid, mixed with clot. Behind the descending part of the aortic arch was felt a solid mass, which on examination proved to be formed by the posterior mediastinum stuffed with clotted blood, and this blood had forced its way down the mediastinum, and must, by its pressure, have been the cause of the pain complained of at the cardiac orifice of the stomach. The parietal pleura on the right side had given way on the spine close above the diaphragm.

Just below the origin of the left subclavian artery was a small aneurismal pouch on the posterior aspect of the aorta, which had ulcerated into the mediastinum and formed a swelling of laminated blood-clot. Just below this was another small aneurismal swelling, which had not ruptured, and was large enough to admit the tip of a finger. The aorta was very atheromatous. The escape of blood in the right pleural sac must have taken place very shortly before death, for certainly on the morning of the 21st there was no evidence of anything like pleuritic effusion on that side. The intensely severe pain during the last few hours of life we thought due to the tension caused by the blood dissecting and forcing its way down the tissues of the posterior mediastinum.

It would not have been easy to have recognised by physical signs during life a small aneurism, not bigger than a small walnut, on the posterior part of the descending thoracic aorta. It is, however, not improbable that the attacks of pain in the limbs which occasionally came on in the winter might have been connected with some pressure-effects of the small aneurism in its early and formative stage.

It is not very uncommon to meet with cases of pain of long standing about the thorax and arms, which eventually proves to be associated with some form of intra-thoracic tumour, causing pressure, and so stretching and irritating certain nerves.—*Med. Times and Gazette.*

Treatment of Diphtheria.—Dr. Cesare Ciattaglia gives an instructive communication on the cure of diphtheria in the *Gazetta Medica di Roma*, which is abstracted in the *Lancet*. For some time he has been successful in treating it with the chlorate of potash internally and the application of the hydrate of chloral to the false membranes. With these he combines a tonic and restorative diet. To children of 3-6 years of age he administers the chlorate of potash in doses varying from 10-15 grammes a day dissolved in 140 of water; while the hydrate of chloral, in the proportion of 4 grammes of the hydrate dissolved in 20 grammes of glycerine, is painted over the diphtheritic patches three or four times a day. For adults the dose of the chlorate of potash is 20 grammes (300 grains). Dr. Ciattaglia points out the certainty with which the application of glycerine solution of hydrate of chloral arrests the progress of the formation of the false membranes. He disclaims any pretension to originality in the nature of the above remedies, since the chlorate of potash was introduced by Vogel, and Ferrini suggested the use of the hydrate of chloral dissolved in glycerine.—*Lancet.*

ON THE TREATMENT OF MENINGEAL HEMORRHAGE.

In the recapitulation at the close of an able article on hemorrhage in the meninges by Dr. Jas. F. Goodhart, in Guy's Hospital Reports, he says :

" 1. It is a disease of old age, and as such in a large proportion of cases is associated with renal disease, a large heart, and bad arteries, and that the arterial tension is therefore high.

" 2. It also occurs in young people when the heart is enlarged from valvular disease, not infrequently from an aneurism in one of the larger cerebral trunks, occasionally from embolism, occasionally in purpura.

" 3. It is a disease which not infrequently is recovered from.

" 4. The gray matter of the convolutions often gives evidence of considerable deterioration, even in cases which have apparently recovered.

" To relieve the high tension which is so prolific a source of cerebral hemorrhage, no remedy is so effectual as free purgation ; and I think there can be no doubt that this means should always be resorted to, both as a means of prevention, which, if carefully guided, may avert the danger of an impending stroke, and which, even when the seizure has come, may yet do much good by lessening the blood-pressure, and so avert further bleeding.

" From the same point of view it seems to me that venesection is a sound practice, and should be adopted, unless there are any special contra-indications which the particular case under treatment may suggest. It is a rapid way of relieving arterial tension, and rapidity is required when hemorrhage has occurred, and the pulse still keeps hard and strong. Ice should at the same time be applied to the head, and the head and shoulders should be raised. By so doing the circulation is reduced locally to its quietest, and risk of further bleeding guarded against as much as is possible.

" To advocate the use of cold locally might seem rather contradictory to the practice which would be suggested by the remarks I have made on the cause of sudden death in some of these cases ; and so it is ; but to restrain the extent of the hemorrhage is so imperative that any secondary or remote risk must not for the moment be considered.

" With regard to the large heart, I should feel disposed, if the other measures were not sufficient, to rely upon the administration of the tinct. of aconite. When the extravasation occurs in valvular disease of the heart and in embolism, but little can be done beyond applying the general rules of treatment which are applicable in this or that state of the heart.

" When, however, meningeal apoplexy occurs in young people, and an embolism is probable, the possibility of the existence of an aneurism must be remembered, and an effort made to establish or negative its presence. An intracranial aneurism has already been diagnosed during life, so that it is possible in some cases to diagnose one again, and in such a case it might even be necessary to obtain the surgeon's aid with reference to the possibility of cure or relief by operation.

" Lastly, I would lay especial stress on the fact that these hemorrhages are probably often present without being suspected ; that they occur from apparently trivial accidents ; and that if care is not exercised, cases which might have perfectly recovered pass on into a state of permanent degeneration of the gray matter of the brain, and even into states of chronic inflammation of the brain and its membranes, thus leading ultimately to confirmed epilepsy, to insanity, and even to death. It really then becomes most important after any severe knock on the head, associated with any brain symptoms whatever, but especially where headache is complained of, or if the slightest intellectual impairment is noticed after the injury, that prolonged rest and quiet to the cerebral circulation should be enforced ; and it need hardly be said that this is to be procured not merely by avoidance of much intellectual and bodily exercise, but also by the strictest moderation in eating and drinking."

The taste of quinine is admirably disguised by the Aromatic Elixir of Licorice. It removes in a great measure the difficulty of administering this drug to children.

Surgery.

TREATMENT OF INDOLENT ULCERS.

BY GEORGE L. BEARDSLEY, A. M., M. D.

Few can take issue with me that this kind is the most refractory. It not only resists change, but will often promise obedience and fairly commence repair, when, suddenly, the granulations collapse and wither, and the surface, which had begun to contract, soon has outskirts as free as before. The reason for these freaks is not so much the perverseness of the inflammation, nor any extraordinary acridity of the discharges, but a paucity or poverty of the blood. Long ere the ulcer announces its arrival, the tone of the economy is somehow degraded. Irritation can never, *per se*, breed a chronic ulcer. It wants the help of flabby fibre and poorly oxygenated blood. The sore, then, proves asthenic (*affaiblissement*), with a species of toxicohæmia.

The way to heal it is to interfere with the liberties of the noxious intruder, to make it abort. Mercury resolves this force very well, particularly when combined with iodine. To such a modifying influence on the blood, the use of chalybeates, to correct any inertia, is to be advised. Cod-liver oil pays good interest also. Its employment in these cases forced itself on me by virtue of its nutrient properties. Far am I from being a sanguine apostle of the faith that this oil acts as a solvent of deposits. In phthisis it is useful only because it supplants a loss of oil globules ; and I have fancied some analogy between the disassimilation in tuberculosis and ulceration, so far as a proneness to waste is concerned. An indolent ulcer of two years' standing cicatrized in three weeks under the exclusive administration of the oil. Even when it fails to build up the wearied fibres, it seems to fortify the surrounding field against subsequent inroads, by supplying it with an extra amount of pabulum. It is, in a word, food, not medicine.

The diet is to be changed at the outset. Patients, especially the illiterate, bolt at believing that errors of living or the quality of food do much in provoking disorders of health. They are led, with no compunctions of good sense, to reason that a sore is as independent a lesion as a bruised eye ; account for it as an accident ; beg of you to confirm their version by swallowing, without hesitation, the history they have learned by heart ; honestly repudiate the possibility of the blood as at fault ; and stock confidence in some wash of Indian fame, or some salve stirred and blessed by an antediluvian dame. The sooner this superstition is scouted the better. Fermented liquors are first to be forbidden. Nine-tenths of ulcer cripples are whisky bibbers or pedestrian beer-tubs. To epicures or "high livers," a diet strictly vegetable and farinaceous is to be adapted. A change from animal to fish food is necessary, and all stimulants or condiments must be discontinued. The purpose, in brief, is to lessen the excess of fibrin, and to annihilate the gouty diathesis. The converse holds for the poor in body. Here we must add wealth to the blood. The problem, it must be confessed, is not easy. Sparse means face the exigencies of most every case, and the cry of the tissues at the injustice done them goes unhushed. It is no marvel, then, that the crops of ulcers are the most exuberant with the labouring population. Yet some variation in diet can be planned. Fresh meat and fruits, with the cereal products, are within the reach of the purses of the majority, and store the blood in good degree with its appropriate funds.

The laws of cleanliness must be enforced. Indolent ulcers cohabit with the dirty classes. The skin is always diseased, either because charged with armies of acari or through absorption of foul exudations. Eczema and scorbutic rashes are firm friends to these sores. Soapsuds without stint will make the *real estate* shrink in value, while sulphur and alkaline baths will restore respectability to the degraded integument. The clothing is to be changed every day and disinfected.

In the topical treatment, there are three indications : (*a*) to keep the border from growing indurated, (*b*) to stimulate, (*c*) to support.

No ulcer can heal if its belt is thick or heavy with lymph. It is just this hard tissue that has none of the groundwork for cicatrization, and is to be removed. Poulticing was the old plan. Its success lay in its creating a slough,

and then resort was had to stimulants. Blistering is advocated, after the same idea. All these agents, including nitric acid and Vienna paste, merely kill, do not arrest future effusions. A slough does no service, unless by its departure it relieves the tension of otherwise sound tissue; in this it generally fails. No better expedient offers than a free incision of the base and welt-like border. The gashes should be in parallel lines, and vary in number according to the size of the sore. Hot water, with liq. sodæ chlorin. (℥iij to Oj), should then flood the wound. If the tissue gives to the knife a sense of resistance, as in cutting parchment, excise all the parts, and essay to convert the ulcer into a wound. This done, one of two methods may follow. Expose the bleeding surface to currents of air from a bellows, or lay on lint soaked in ice-water; and as soon as the oozing has ceased, bring the edges into contact by adhesive strips, and cover with collodion, in the hope that the wound will heal by first intention. This procedure is confined to small ulcers. The other plan is to force cicatrization. This is attempted by lotions that are cleansing and stimulating. The policy is to instil into the lax tissue enough vigour to enable it to throw off a strong plasma, and is directed to ulcers whose territory is less circumscribed. The solutions of copper and zinc are in this respect profitable, and must be slightly caustic in their impression. No astringent effect is wanted, as it is not presumed that on a wound thus manufactured any surplus of secretion can show a need for repression. Tinct. capsici (℥j to aq. ℥j) fires the papillæ successfully. The Peru bals. is a ready agent. It is to be mixed with glycerine and dropped on oakum. Poured clear into the wound, it is not entertained as pleasantly, on account of its viscosity. Carbolic acid in ashes serves a double purpose. While they goad the granulations legitimately, they neutralize all traces of fetor.

If the knife is not allowed, through the bias of the party or from the proximity of the sore to vessels of size, the edges may be softened or made less callous by ointments. The glyceramyls are the neatest preparation. Cod-liver oil paste works graciously. My objection to all cerates is their rancidity. As found in shops, they are acid through fermentation. An unguent is supposed to possess the power of mollifying the raw tissue, and to restrain the laudable pus from evaporating. Hence they must be fresh, or compounded at the time ordered. As all samples are so unreliable, the animal oils are my choice. An excellent remedy to make the margin tender is iodine; painting with the tincture several times a week acts often as a specific. If the thickening is quite deep, the crystals, dissolved in glycerine, take hold better. The iodide of lead used in this way works a similar reform.

The last measure is electrolysis. To some it may appear that in advocating the pertinence of electrical currents to "old sores" I have been on a hunt for some novel dodge, and have gone mad with enthusiasm, like a few of my brethren, on the miraculous and unmeasured force conserved in this agent. I am not generous enough to believe that electricity can ever vindicate more than a sixth of the remedial coercion credited to it. It was solely an experiment that led me into the trick of trying such persuasions on indolent ulcers, and my scepticism has not been sustained by the trial. Electricity is to be recommended only in the first stage of the induration. When the borders become tough and puckered, it is useless, After an acquaintance daily for two weeks with either current, the tissue will feel soft and take steps to contraction. An ulcer on the inner malleolus, which had turned against various forms of medication, succumbed to the sole presentation of electricity. Four other cases that were pensioners on my surgical beneficence for six to ten months recovered under the same auspices.

In the preceding remarks on the ways to abolish indurated margins, it was consented that the work of cicatrization could not go on so long as contraction was neglected. The fault may also be with the granulations. If these are insensible or ash-coloured, or sprout so rapidly as to dangle from the base, they should be disturbed and a better crop favoured. Granulations must be instructed to grow slowly, closely, and to secrete pus moderately. If all progressed thus, exudation cells would change without help to epithelial, the sore would shrink, and its investment blend with the mar-

ginal structures. The granulations, then, may be so weak as to need encouragement. Often they are suddenly absorbed, or form so late and tediously as to waste their strength in endeavours to grow. Stimulating dressings are then imperative. Wine of tar, decoction of pulsatilla, diluted alcohol and copper washes are the most serviceable. The "citrine ointment" or the nitric acid lotion answers by evasion of a trial of new pharmaceutical products. Iodoform works often as a specific on these sores. Dry lint should top the sore to keep the pus from drying, and to defend the sensibility of the granulations. If these soar too high or thicken ranks rapidly, we must thin and curb them. The question is, When? My rule leads me, just as soon as they overreach the borders, to level them to the same line. Nothing is gained by a savage cauterization. Nit. arg. is powerful enough. The entire area is to be penciled once in three days, and the cone is not to be plunged into the mass. The papillæ are to be just touched, as the mission of caustic is only to check temporarily any exuberance of exudation. It has evidently been the judgment of many that the redemption of a sore hung on a destruction of its means of repair. This is virtually what the violent service of nitric acid and the caustic compounds of potash, as defended, means. A solution of chlorate potassa has been prescribed, with numerous assurances of its happy working. The iodide sulph., sulph. cadmium, and hyd. oxyd. rubrum have been similarly tested. Granulations, thus kindly dealt with, early lose all fungous eccentricities and become coated with the rudimentary pellicle. Finally, the logic of ulceration teaches a pressing need for supports. Bandaging and strapping are the kinds in use. The former has taken to itself the prefix of an art, and as such has been amplified in treatises on surgery. The latter is its offshoot, and is making a history, to be avenged by-and-by. The law for each makes pressure everywhere equal and moderate, to which may be appended that no traction on the margin is permissible. The more extensive a cicatrix, the greater the liability of its remaining sickly or bursting, and hence no stress must be put on the tissue in contiguity, any more than on the granulations. If bandages are preferred, they must be selected of flannel or calico, and starched and dried. The length for the leg is four yards. Strips wider than three inches are unwieldy. The limb must be washed, and dusted with prepared chalk before the roller is started; and when the bandages encircle joints, surfaces uneven or exposed to friction, cotton batting may be slipped under the circles. Begin at the medio-tarsal junction, and fasten the first ring; lead the second or lap it half an inch; carry the roller across the instep, making it return on the opposite half, at the same angle; proceed, describing the same belts up the leg, or to the sore. All the plaits must be wound smoothly, within two inches of the ulcer, where the strip may be fastened and cut. The roller is not to be applied like a compress, nor in a way to flatten or cord the limb, but so that each fold shall *lift up* the parts. To approximate the edges of the sore, pass a strip of the width of the ulcer, and an inch and a half longer than the circumference of the limb, at the site of the sore, and stick the free ends to a pencil or pen-holder; then relieve the stick until it lifts the bandage as tight as it can be drawn, and fasten the coil by adhesive strips. The patient is to be instructed to turn this piece every third day, or whenever the plait slackens. Rightly adjusted, the bandages need not be rearranged for a week, unless the limb rebels at its confinement, or the cloth becomes soiled by the discharges. Securely as a bandage may be applied at first, it loosens in a few days; the cloth gives, or the circles become deranged through exercise. These risks turned surgeons to a substitute, strapping. Experience proves it superior.

A limb thus bound has a no less pleasant sensation. Originally, they were made to draw the edges into coaptation, but this intention has been modified, and the entire limb is now strapped, since, with the majority of indolent ulcers, a venous stasis prevails which calls for reduction, and an infirmity of the vessels that makes them need some stay.

The plaster should be of one strip, a yard long, half an inch wide, and rolled. Fasten the free head to the inner side of the foot, back of the toes, and moistening the plaster with a sponge as it leaves the hand, pass it around the

member spirally. Carry the circles as far as the ankle; finish by one turn around the heel. Start another roller up the limb, caring that the doloires ascend regularly, in connected lines, not lapping, with a steady pressure, as far as the ulcer, which is to be crossed until covered. Whenever a conference with the sore is necessary, remove only the sections of plaster that cap it, then dress it with separate slips. If the leg is strapped comfortably and firmly, the plasters may remain untouched for weeks. It is better that they should, as the tissues are at once relaxed on their removal, and a severe strain is inflicted on the tender sprouts of skin.

FIBROID TUMOUR OF THE PROSTATE SUCCESSFULLY TREATED BY INJECTION OF IODINE (*Virginia Medical Monthly*, June, 1876).—Dr. Melville Taylor reports the case of a man, æt. 26, who, when he first came under observation, had the following history. About nine months previously he had discovered a tumour the size of a chestnut in the perineum, just behind the scrotum; it was at first moveable, but soon became stationary. Its growth was progressive. He had never had any pain, but complained of a sense of weight and dragging in the perineum, and of severe tenesmus. He urinated frequently, slowly, and with much straining, the water at times containing mucus, and being ammoniacal. Lately his urine had been dribbling from him. His walking was greatly interfered with by the tumour between the thighs, and it was for this reason only that he applied for relief. Exploration of the prostate by rectal touch revealed an abnormal enlargement of this organ It was hard and firm, presenting to the fingers four different segments. No increased sensibility. Upon the passage of the catheter, an obstruction was met with at the prostatic portion of the urethra; but this, after some manipulation and not a little pain to the patient, was overcome, and the instrument slipped into the bladder, when about ʒxx of fetid urine was passed, although he had urinated previous to its passage. The catheter caused some pain when impinged against the walls of the bladder.

The diagnosis of fibroid being made after a few other examinations, treatment was commenced by the injection of iodine into the tumor, fifteen drops of the tincture being used at intervals of several days. There was some little irritation at first, but this soon subsided, and the final result was a complete cure, the prostate decreasing from the size of a base-ball to its normal dimensions.

THE VALUE OF PRESSURE IN SEMI-MALIGNANT MAMMARY TUMOURS.

The suggestion contained in the following extract from a clinical lecture, by Dr. George Buchanan, Professor of Clinical Surgery in the University of Glasgow, is so valuable that we give it prominence:—

There is a kind of tumour which belongs to the simple, or non-malignant fibrous kind, which partakes of malignancy, inasmuch as it returns after removal. Such is the tumour which used to be called recurring fibrous tumour. The question I am going to discuss is not so much the possibility of treating these tumours medically in the way of palliation, but particularly with regard to surgical removal. I wish, however, to tell you at the outset that, because a person has a well-defined tumour in the mamma, it is not absolutely necessary to excise it. I shall say nothing at present with regard to removal by caustics; but it has fallen within my own experience to have seen several most remarkable examples of the disappearance, I might almost use the term cure, of tumour by pressure; and that information is, I think, of great value, because in many cases, from the constitution, or the age of the patient, or from the implication of the neighbouring parts, you could not, with any degree of conscientiousness, recommend removal of the tumour; but I could show you ladies in Glasgow, at the present day, who have had tumours in their mammæ, and who are now absolutely free from the disease by the application of careful and well-directed pressure. You are aware that pressure will cause absorption, both of normal and of abnormal tissues; and you are probably aware that, if a person have an aneurism of the aorta, and if the aneurism continue to grow, it not unfrequently happens, through the tumour pressing upon the sternum, that it gradually induces absorption of the bone until it appears underneath the skin, and if not arrested it spontaneously bursts, and causes loss of life. We are all aware of the importance of pressure in assisting the absorption of abnormal fluids; as by the use of a splint and bandage in cases of effusion into joints. In the same way, pressure, well directed to the breast, has a remarkable effect in causing the absorption of

tumours; and I now am in the habit of ordering the application of a properly-prepared apparatus in cases where, either from the situation, or the implication of the neighbouring parts, I consider that the operation of excising the mamma would be unadvisable.—*Medical and Surgical Reporter.*

SYPHILITIC TEETH.—At the inaugural meeting of the Association of Surgeons practising dental surgery, in London, Mr. Jonathan Hutchinson, in a discussion on the "Manifestation of Syphilis in the Teeth," declared that he still adhered to the belief that the teeth, which he described twelve or fifteen years ago as accompanying hereditary syphilis, were really and invariably characteristic of that disease. He thought the confusion of opinion on the subject grew out of the fact that this peculiar deformity had been confounded with other malformations, and especially with that arising from stomatitis, and usually mercurial stomatitis. The test teeth in the case of syphilis are the *central upper incisors of the permanent set*, and he had yet to see the first case in which these presented the single, small, lunar cleft, and were dwarfed in their general dimensions, in any other than a subject of inherited syphilis. The tooth which is damaged by stomatitis is the first molar, because that is the first tooth in the patient's head to be calcified, and, developing much more rapidly than the rest, it is the tooth which suffers most if stomatitis occurs during the first six months of life. It never escapes if the teeth are damaged by mercury. Next come the four incisors and the canines; and the two pre-molars invariably escape. Mr. Coleman and himself had hit upon the fact that patients with lamellar cataract always have these mercurial teeth; and Prof. Arlt, of Vienna, had added the observation that there is also, connected with these two conditions, a history of convulsions in infancy. The relation of these facts to each other is believed to be, that the mercury is given for the convulsions, the convulsions cause the cataract, and the mercury causes the deformity of the teeth. In conclusion, Mr. Hutchinson repeated the friendly challenge, which he had given for the last ten years, that he would take great pleasure in investigating the history of any case of characteristic syphilitic teeth without evidence of syphilis.—*Medical Times and Gazette.*

EMBOLISM OF THE PULMONARY ARTERY AFTER APPLICATION OF ESMARCH'S BANDAGE TO THE INFERIOR EXTREMITIES.

The application of Esmarch's bandage has been recommended as a means of relieving the debility consequent to hæmorrhages; by causing the return of the blood from the extremities into the viscera of the body, the diminished amount of blood is made to serve the purposes of nutrition, and life is maintained. In the *Wien. Med. Wchschrft.* for November 27, 1875, Dr. Massari publishes a case from the clinic of Prof. Spalth, which confirms this method of combating anæmia, but likewise points out one of its dangers. The patient was a woman, thirty-three years old, who was in a state of extreme collapse after hæmorrhage from placenta prævia. The application of the bandages to the two inferior extremities at first proved beneficial, but several hours afterward the pain of compression became so great that their removal was attempted, but the return of syncope, etc., necessitated their immediate re-application. There was no further change during the day, but at 11 p. m. pain recommenced, and the bandage of the left leg was relaxed, when the patient immediately became pale, complained of an intense precordial pain, the pulse became imperceptible, respiration anxious. Compression of the abdominal aorta was made, the bandage re-applied, and stimulants administered, after which the patient rallied somewhat. The pulse again became perceptible, but the cardiac and respiratory disturbances persisted, and the patient died two hours after. The autopsy revealed in both lungs several of the ramifications of the smaller branches of the pulmonary artery obliterated by small emboli, 3-4 millimetres in thickness. On dissecting the inferior extremities, the saphenæ veins were found varicose; they contained small clots similar to those found in the pulmonary vessels. The explanation, therefore, was that a certain amount of blood had remained in the compressed veins and coagulated. When the bandage was loosened, some of these clots had been loosened by the re-established circulation, and, passing into the circulation, had given rise to pulmonary embolism.—*N. Y. Medical Journal.*

Therapeutics.

COLD WATER IN FEVER.

BY DR. C. BINZ.

Professor at the University of Bonn.

It is not long since every fever patient was carefully guarded from pure air and fresh water. Thick blankets and hot beverages seemed indispensable. Several medical men observed that this treatment did more harm than good; but James Currie was the first to have any success in fighting against these prejudices.

Old and deeply-rooted errors do not fall at one blow, especially when they derive support from the extravagances of the opposition. So at least it was with us. Priessnitz, and the fanatic hydrotherapeutists who followed him, barred the way for a long time to the rational use of cool water; and it is only about fifteen years ago that we recurred to the healthy principles of Currie.

The matter itself is very simple. If a patient at 40° C. (104 F.) is placed in a bath at a lower temperature, he must quickly part with heat. In fever the natural regulation of heat which keeps our body at an almost equal temperature is insufficient. The cool bath makes up for this. If we measure the temperature after the bath, we shall find it lower than before. The blood that surrounds the cells of our nerve centres is less hot. The patient therefore feels stronger and quieter.

Cold baths (15–20° C.=60–68 F.) have the clearest effect. Extensive experience has taught that their action is most positive when they are short and often repeated. Very weak patients must begin with 35° (97 F.) and then the warmth must be lowered to 20° (68 F.), by carefully and gradually adding cold water. In the meantime the body should be gently rubbed.

Cold sheets (Kalte Einwicklungen) are less efficacious and cold affusions (Uebergiessungen) have less effect; this latter considered merely from the antipyretic point of view.

Only a high degree of weakness of the heart, loss of blood, or perforation of the bowels, are contra-indications against the use of cold baths. Menstruation is not one when the fever is at a dangerous height, and pregnancy never. Every age and every constituion permits the withdrawal of fever heat, only it must be observed that the loss of heat is in inverse proportion to the weight of the body. For babies we need therefore seldom go under 30° C. (86° F.) to have a full effect; the temperature of the water must be lowest for strong adults.

External application of cold proves, like all other febrifuges, to be most efficacious when the temperature has a tendency to sink spontaneously. That is from seven in the evening till morning, and again in the day from eleven till two o'clock

The after-effect is of great importance. Under some circumstances it lasts several hours, that is, the lower temperature continues even when the patient has been removed from the water. The reason is probably as follows:—

In fever the vessels of the skin are generally much contracted. The cool water acts as a strong stimulant on them, and causes a somewhat stronger contraction to take place, but this is only of short duration. Relaxation for a longer term is the necessary consequence. The hitherto bloodless and dry skin becomes filled and moist, and thus the irradiation of warmth goes on. It is easy to convince oneself of this state of the skin after the bath. The cooler the bath and the longer it lasts, the more evident and the more lasting will be its result.—*Practitioner.*

Fœtal Condition of the Lung in a Child that had Cried.—Dr. Erman, of Hamburg, relates the case of a woman who was delivered of three seven-and-a-half months' children, two coming into the world living, and the third being dead-born. Both these children cried loudly while being washed, their cries being heard in another room, some distance off. They both died half an hour after they were born. At the autopsy it was found that the whole of the lung of the one child sank in water, even when cut into small pieces; and the lung of the other did the same, except as regards a very small portion of the edge of one of the lungs. The lungs in both were undistended, dense, and of a bluish colour.—*Virchow's Archiv.*, B. 66, Heft 3.

Midwifery.

SOME CASES OF RETAINED OVUM.

BY FLEETWOOD CHURCHILL, M.D., M.R.I.A.

In January, 1875, Dr. M'Clintock published a valuable paper on this subject, which he had previously read to the Obstetrical Society. He entered so fully into the question that he anticipated most of what I might have felt it my duty to say. I can confirm, from my own experience, what he then stated; and in so saying, I may spare the society a repetition, and confine myself to the relation of a few of the cases which occurred in my own practice.

Case I.—Mrs. R. consulted me many years ago for a recurrent bleeding from the womb, which, though never excessive, had annoyed her for some time.

She told me that she had miscarried three months before, and of this she had no doubt. There were no symptoms of pregnancy, no enlargement of the breasts, no morning sickness, and no tumour to be felt above or behind the pubis. Under these circumstances I thought that it might be simple irregularity from congestion, which so often follows miscarriage.

As the discharge was going on when I saw her, I prescribed some ergot of rye, and the next day I found it had brought away the shell of an ovum, the fœtus being absent. The lady recovered at once, and had several children afterwards.

Case II.—Mrs. M., who had previously had several children, and suffered from chronic endo-metritis, missed two or three periods, and believed herself pregnant. A short time afterwards, however, she told me that her changes had recurred, and they continued to return, though irregularly, for some time. Somewhere about six months after the first stoppage I saw her, and could find no sign of pregnancy, neither morning sickness nor areolar development, nor glandular enlargement of the breast. There was clearly enlargement of the uterus, as it could be felt above the pubis, but whether from containing something or from general enlargement I could not make out. There was neither the fœtal heart to be heard nor the placental souffle.

Although the lady maintained that she was not pregnant, I thought it worth while to try the ergot, and was greatly gratified when I found the next day that she had expelled a macerated ovum with a fœtus of near three months, which must have been retained between two and three months after its death. Let me add that neither the discharges nor the ovum had any fœtor.

Case III.—Mrs. A. came up from the country to consult me about an irregular discharge from which she had suffered three months. She had previously had several children, and did not believe herself to be pregnant. As there had been no suspension of menstruation, and as there was no symptom of pregnancy, I thought it might be an ordinary case of menorrhagia, more especially as I found the os uteri wide open and granular. I therefore passed the sound, which entered four inches, but neither blood nor watery discharge followed.

In the evening she sent for me on account of severe pain—uterine apparently—for which I prescribed a full opiate.

On calling the next morning I found a macerated ovum of two months, which had been expelled during the night.

Case IV.—Mrs. P., mother of three or four children, consulted me for menorrhagia, from which she had suffered for some months. It recurred each month, and was very profuse, of which her pallid face was evidence. She told me that she had miscarried a good while (I do not remember the exact time) before, but was very positive that she was not then pregnant. Nor had she any symptoms thereof. I found the uterus enlarged, with a wide open granular os, and other evidences of endo-metritis, for which I treated her.

This went on for two or three weeks, when one night the flooding became so alarming that she sent for Dr. Pollock, who lived near. He plugged the vagina and ordered the usual remedies, and the next day we found her without pain, but blanched. The hæmorrhage, however, was arrested. It recurred subsequently, but less violently, and we determined to give ergot, in order that, if the cavity of the uterus contained anything, it might be expelled.

Early the next morning, when Dr. Pollock

made an examination, he found a substance protruding through the os, and with some difficulty he removed it. It proved to be a macerated ovum of about three months, much condensed. She was some months in recovering from the loss of blood.

Case V.—In March, 1872, Dr. Frazer, 40th Regiment, asked me to visit a patient with him who was suffering from some enlargement of the womb. She was a young woman, about twenty-two years of age, had previously enjoyed good health, was the mother of several children, the last of whom she had weaned in January.

From the previous December (1871) she had been troubled with uterine discharge of a pale red colour, stopping at intervals, and recurring, but irregularly. She refused to believe that she could be pregnant, as the discharge commenced in December, and she did not wean her baby until February, and the milk had not failed. In March she discovered a tumour above the pubis. I found her free from pain, but weakened by the repeated discharges. At the moment she was free from discharge. There were no symptoms of pregnancy, nor could I make out any ground for believing her so. I found the uterus reaching midway between the pubis and umbilicus, without tenderness or great hardness. Internally, I found the vagina relaxed, the uterus bellying out above the cervix, the os wide open, as in endo-metritis.

As she had had several children, and was familiar with the symptoms of pregnancy, yet declared herself not pregnant, and as I could detect no such evidences, I felt myself at liberty to use the uterine sound. It passed five inches into the uterine cavity, gave no pain, and was followed by no discharge of any kind. So far I was inclined to consider the case one of polypus, or fibroid or interstitial enlargement, and I proposed a further examination in two days, and, if necessary, the use of tangle tents.

Two days afterwards I received a note from Dr. F., commencing: "Our patient has sold us somewhat. She had violent pains last night, and expelled a macerated fœtus" of about four months. There was a good deal of hæmorrhage, and some difficulty in removing the placenta. She had a slight feverish attack, but recovered well.

Case VI.—In 1872 a lady, aged forty-eight, came up from the country to consult me about a tumour she had detected in the lower part of the abdomen between the pubis and umbilicus.

It was firm though not hard, and had the shape of the uterus, but was very moveable. With the stethoscope I could detect neither fœtal heart nor placental souffle. A bi-manual examination showed it to be the uterus. There was no change in the breasts or nipples. She had had fourteen children, and did not believe that she was pregnant. Some six months before, menstruation had stopped for two or three months, which she supposed was preparatory to its ceasing altogether. It did, however, return slightly and irregularly.

Not being quite satisfied, I postponed for a day or two making an examination with the sound, but that very evening I was sent for in a hurry, and found a macerated fœtus of four months, with its placenta, lying in the bed. In this case only, of all the six cases, the membranes had not been ruptured until the fœtus was expelled.

I have related these six cases as examples of cases not very unfrequently met with. They are not all I have seen, but of others I have no notes. I have no means of computing the comparative frequency of such instances.

I quite agree with Dr. M'Clintock in the difficulty of the diagnosis, not merely because, as in all my cases, there is an absence of the ordinary symptoms of pregnancy, but because of circumstances which are decidedly misleading—*e.g.*, the lady telling us that she has miscarried some time before, or that she is "regular," or certain that she is not pregnant. Although the latter assertion only carries weight in the case of separation of husband and wife, yet in the case of a woman who has had many children it cannot be quite overlooked, and most certainly tends to confuse our diagnosis. In one or two cases I was either thus misled or off my guard, and was quite taken aback when the fœtus was expelled; but in others, where I was quite prepared for the possibility of a retained ovum, I could find no symptom on which to ground such a conclusion.

I am very much inclined to think that we are justified, on the ground of diagnosis, in

adopting what I believe to be the best method of treatment—viz., the introduction of the sound and the exhibition of ergot. In such cases as those I have related, where the usual symptoms are absent, or where, having existed, they have ceased for some months, we may be pretty sure that the fœtus is dead, and consequently we shall not be interfering unadvisedly with gestation by employing such means as may cause the uterus to contract. If the uterus contain nothing, but is enlarged from other causes. the ergot and sound will do no harm, nor interfere with such other treatment as may be necessary.

As Dr. M'Clintock has observed, when the ovum is macerated or putrid there is rarely any hæmorrhage. One of my cases was an exception, and she was the only one whose recovery was slow. All, however, did recover.

I am sorry that in none can I fix with any accuracy the duration of the retention. In all but one the membranes had been ruptured long before expulsion, but in none was there any fœtor of the discharges.

The President had had a very interesting case of the kind under his observation, in which the ovum was retained for eleven months, and in that case the prominent symptom was the total suppression of menstruation. After being pregnant some eight or ten weeks, the patient met with a slight accident, and had an attack of hæmorrhage, followed by severe pain. Subsequently the discharge ceased, and for the succeeding nine months there was no return what ever of the menstrual discharge, nor any sanguineous discharge whatsoever, but her general health continued good. She was kept in hospital, and the examination which was made seemed sufficient to excite uterine action, and in the course of twenty-four hours she expelled a mole. He had also a case in which a lady, after five months' pregnancy, retained a dead fœtus for more than three months.

Dr. M'Clintock said the cases were very perplexing in practice, and caused a great deal of anxiety to the patient and her friends, and the negative course that the medical man was often obliged to pursue was rather trying and difficult. Dr. Churchill seemed to have been very fortunate in the treatment of his cases, that he was enabled to accomplish the expulsion of the ovum by the use of the sound, and the administration of ergot of rye, for cases were occasionally met with where such mild measures as these were quite insufficient to effect the emptying of the uterus, and, of course, until that be done, and any remains of the ovum removed, the woman was liable to hæmorrhage. He believed, however, that cases would be occasionally met with where those measures would completely fail. The use of plugging very often had a beneficial effect in bringing about expulsive action in the uterus. A man would, however, hesitate before employing the plug as long as there was any possibility of preserving the ovum, for it was almost certainly followed by expulsive action of the uterus.

Dr. Kidd said a case of the kind had lately come under his observation which illustrated the difficulty which Dr. M'Clintock had spoken of as to the position in which the medical man was placed, for he believed he was very frequently likely to be considered as not knowing what he was about—in fact, in some instances, not to understand the case at all. Some time ago a lady came to Dublin who had been in India, occupying a very prominent position there, and soon after coming to Dublin she had some hæmorrhage from the uterus. He was sent for, and gave it as his opinion that she was threatened with a miscarriage. However, she would not believe she was pregnant at all, and after undergoing a very careful examination, he reiterated his opinion that she was threatened with miscarriage, and that she was pregnant. She had, however, passed the period when quickening would have occurred. She had had several children; more than five months had passed since her previous menstruation, and the uterus, she said, had ceased to grow, for she maintained it was a tumour. He could not hear any sound in the tumour, and the breasts did not exhibit the plain indications of pregnancy. When he examined the uterus he was quite able to ascertain that the tumour was a uterine one. Then the os uteri had the peculiar soft pulpy feel that the os uteri had in cases of pregnancy, but as far as his experience went, it never had in cases of uterine tumour. That lady had repeated attacks of hæmorrhage, and he watched the case for some time. One day,

however, the lady's discontent arrived at such a pitch that she sent for Dr. M'Clintock, but he refused to see her when he learned that he (Dr. Kidd) had charge of the case. She then went to London, and consulted one of the most eminent obstetricians there, but he (Dr. Kidd) believed the gentleman was led away by the statements of the lady, for he sent her to Kreuznach to get rid of the tumour, which, however, proved to be a four months' fœtus. He believed that, in the first instance, it was best to express only qualified opinions in such cases, and always assume that the patient was pregnant, but not adopt any expedient to insure the expulsion of the child until we had indisputable evidence of its death.

Dr. Denham said he thought that their attention ought to be directed to the importance of preserving the life of the mother. He thought in cases of retained ovum in which there had been repeated hæmorrhages it was scarcely worth their trouble to preserve the ovum. In two of the six cases mentioned ergot seemed to have had a magic effect, and to have brought about immediate relief. His experience of the use of ergot was by no means commensurate with those facts. He had used it again and again without really much effect. If they came to the conclusion that active measures must be taken, he had no hesitation in saying that they should apply the sound, which he thought was better than the exhibition of ergot.

The President would like to confirm what had been said by Dr. Denham with regard to the inefficiency of ergot in such cases as those of retained ovum. He believed in its effect in arresting hæmorrhage, but it did not necessarily expel the ovum, and he believed it had no effect in doing so. He had recently had a patient who had previously had three miscarriages, and who was, for the fourth time, suffering from well-marked symptoms of abortion in the third month of her pregnancy. In her case he administered ergot for three weeks, and the result was that the hæmorrhage and pain ceased, and she went on to her full time.—*Obstet. Jour.*

Sir William Fergusson. — We have the pleasure to report that Sir William Fergusson continues to make good progress and to regain strength. He now walks downstairs, and, weather permitting, he will be taking a daily drive.

A CASE OF COMPLICATED LABOUR.

BY A. V. MACAN, M.B.

In such cases Professor V. Hecker, of Munich, has used the subcutaneous injection of ether with marked success, and recommends it strongly to the profession. The importance of the subject, the respect due to such a high authority, and the fact that cases in which this treatment can be put to the test happen but rarely in the practice of any one individual, must be my excuse for bringing a single case, and that, perhaps, an exceptionally favourable one, under the notice of this Society, without waiting to see whether further experience would, or would not, confirm the results obtained in this instance.

I was requested by Mr. Kilbride, then one of the intern pupils of the Rotunda Hospital, to visit a case of tedious face presentation, at 22, Temple Bar, off Fleet Street.

* * * She was quite insensible, deadly pale, and pulseless, with fixed eyes, dilated pupils, clammy face and extremities, and short and superficial respiration. On examining the vulva, I found there was a thin streak of blood flowing over the thigh, and as it was obvious that if the smallest quantity more blood were lost the patient must die, I determined to combine the injection of the perchloride of iron into the uterus with the subcutaneous injection of ether. Having, therefore, grasped a fold of the skin covering the abdomen, I injected two syringefuls, or about ʒss, of ether well into the subcutaneous cellular tissue, and then injected about six ounces of the usual solution of iron into the uterus. Before I had finished injecting the iron the pulse returned at the wrist, and, emboldened by this, I injected a third syringeful of ether close to the former one. The effect produced was most marked, the woman soon turning of her own accord over on her side, and declaring, when asked how she was, that she felt much better. The change was so sudden and so great that every one in the room was satisfied it was produced by the ether. Shortly afterwards the woman vomited, and though it was a long time before reaction was established, the woman improved so much that I felt justified in again leaving her in charge

of Mr. Kilbride, whom I have to thank for his great care and attention of the case throughout.

* * * With regard to the subcutaneous injection of ether, there are one or two things which require further explanation. The first is the quantity to be used. This depends entirely on the patient's pulse. Professor Hecker frequently injects fifteen syringefuls (about ʒiv) from three to five at a time, at short intervals. The injection may require to be repeated, as the effect is very transitory. The part most suitable is the loose abdominal walls, but the gluteal region is easier got at if the woman has on a binder. The only thing to be attended to in making the injection is to pass the needle deep enough; if you fail to do this, you will probably have a troublesome abscess. Professor v. Hecker has never seen an abscess formed at the seat of the injection. The injection itself is rather painful, but this is of little moment if his statement be true, that it will in many cases render transfusion unnecessary; even if not quite so efficacious, it is at all events free from danger, and can be carried out without any assistance or complicated apparatus. Its use need not at all be confined to cases of post-partum hæmorrhage. I have myself since used it in accidental hæmorrhage, where it enabled me to deliver at once, though the patient had been pulseless for more than an hour. I have also used it in puerperal fever, but without permanent benefit, though the pulse, which could not be felt before the injection, re turned almost immediately; also in a case of rupture of the uterus, where, I think, it prolonged life.

In surgical practice it was used long ago by Dr. Bennett for collapse in a case of strangulated hernia, and Mr. Croly has lately used it in a similar case—with what result I do not exactly know.

Professor Winckle, of Dresden, has used it with great success in a case of pulmonary embolism following confinement, where it completely relieved the intense dyspnœa.

There is, I think, little doubt that this treatment is deserving of our careful consideration, though only a more extended trial by different and unprejudiced observers can finally determine its exact therapeutic value.

The President had recently been asked to visit a case of placenta prævia. On his arrival he found the patient pulseless—in fact, she appeared to be moribund. The vagina had been promptly plugged, but the hæmorrhage previously had been very great. She had got out of bed early in the night to pass water, and while she was in the act of doing so severe hæmorrhage set in. A large chamber utensil was two-thirds filled with blood, and the bed was saturated. Brandy had been given freely, but she had vomited it as rapidly as it was taken. He decided on trying the treatment suggested by Dr. Macan, and injected two syringefuls, or about a drachm, of ether. In a short time he was able to leave the patient, and next morning he delivered a dead fœtus by version. She recovered without any bad symptom. In ether they had a stimulant which could be given hypodermically, safely and efficiently, when the condition of the stomach rendered it impossible to give stimulants in any other way. Within ten minutes after the injection they could smell the ether in the patient's breath.

Dr. Wilson hoped that the new mode of treatment recommended by Dr. Macan would be extensively published as one adopted by the Irish school of surgery.

Dr. M'Clintock thought that the treatment adopted was a valuable acquisition to our resources, and possessed several advantages over transfusion. He thought it might be useful in cases of chloroform poisoning. — *Obstetrical Journal.*

A Pleasant Solution of Sulphate-Quinine. —In many cases we wish to prescribe sulphate quinine, and to get a solution clear from turbidity is a *desideratum.* With aromatic sulphuric acid we get a passable solution, but the acid is often objectionable, if not absolutely contra-indicated. In practice, I find the spiritus etheris dulcis to be all that is desired. One ounce of it will dissolve about two drachms of quinine, giving a transparent solution. I am not aware that this solvent has been recommended. To those who have not use it, a trial will, I believe, be a success most agreeable to both patient and physician.—Isaac Smith, Jun., in *N. Y. Med. Journal.*

TWO CASES OF A PESSARY IMPACTED IN THE VAGINA FOR MORE THAN A YEAR.

BY GEORGE BUCHANAN, M.A., M.D.

(Professor of Clinical Surgery in the University of Glasgow.)

Within the last eighteen months two cases have come under my care in the wards of the Western Infirmary, which though not by any means unusual, yet are sufficiently interesting to warrant narration, and prove a warning to medical men to be most exact in their instructions to patients whom they advise to wear these instruments.

Mrs. M., aged forty-eight, was admitted on the 8th June, 1875. She stated that nearly five years ago an instrument had been put into the vagina to support a prolapsed uterus. She understood that she was to wear it constantly, and from that time till a few days before admission she submitted to it, though it was often the source of great pain and annoyance, without having recourse to medical advice.

On examination it is found that the labia and thighs are excoriated with urine which drips from the passage, and between the labia are seen projecting the ebony handle of a Zwanck's pessary, the blades of which are firmly adherent to the walls of the vagina.

She was put under the influence of chloroform, and by continued traction and partial rotation, while the forefinger of the left hand was retained in the vagina to prevent the walls from being pulled down, the instrument was gradually extracted. One of the limbs of the pessary had ulcerated through the anterior wall into the bladder, and through the fistulous opening thus made the urine had trickled, and the whole instrument was coated about a quarter of an inch thick with urinary deposit.

She was kept in bed for two or three days and then allowed to go home, with a request that she would present herself in a few weeks after, so that the opening in the bladder might be closed. She did not return, so it is presumable that the vesico-vaginal fistula caused by the ulceration has spontaneously closed.

Case II.—Mrs. W., aged sixty-one, was admitted to the Western Infirmary on the 2nd June, 1876.

About a year ago a modification of Hodge's pessary was introduced to support the uterus. She must have misunderstood the instructions given her, for in spite of feeling great pain and discomfort about three weeks after the instrument was introduced, she continued to bear the pain under the impression that in no case was the pessary to be removed. After some weeks of suffering the pain subsided, and she was able to go about as usual. Recently, however, she began again to feel annoyance in the parts, and she applied to a medical man. Finding that the pessary was in some way adherent he sent her into the hospital.

7th June.—Patient being put under chloroform, the small end of the ring-like pessary was found lying just within the vagina, and on pulling it, the upper end was found firmly adherent to the vaginal wall, being retained there by a band of tissue as thick as the little finger which had united over instrument.

Evidently the ring of the pessary had ulcerated into the lateral vaginal wall the depth of an inch; the ulcerated edges of the sulcus, which it had excavated, had fallen together over the ring, and had adhered to one another so as to form a firm retaining band.

The vaginal walls being held apart by a retractor, the retaining band was divided with a scalpel, and the pessary released from its hold and easily removed.

It is hardly necessary to say that the lesson derived from these two cases is, the very great importance of giving the most simple and exact instructions to all patients, who are themselves entrusted with the charge of any instruments necessary for the treatment of their case. Medical men are sometimes apt to take it for granted that patients will do things as matters of common sense. But that should never be trusted to.

A short time ago I was consulted about an infant three months old, the subject of a hernia. The mother had been instructed by her medical attendant to procure a truss, which the child was ordered to wear *constantly*. The result was, that after the child had worn the truss for six weeks without ever having had it taken off for the purposes of cleansing, excoriation and subsequent ulceration of the skin at the groin took place.

Consequences equally distressing occur when patients are entrusted, without specific and simple orders, with other instruments—such as bougies, catheters, &c.—*Obstet. Jour.*

TREATMENT OF SHOULDER PRESENTATIONS.

BY EDWARD WARREN, PARIS.

[The following is taken from a letter by Dr. P. H. Maxon, of Syracuse, New York, giving an account of his treatment of shoulder presentations.]

He says: "I hasten to give you in a condensed form an account of my plan of *treating shoulder presentations*. Gravity is the principle invoked; and I was led to the discovery in 1860 by placing a woman with prolapsed cord on her knees, with her head and shoulders low, as recommended by Dr. T. G. Thomas, of New York, in order to effect its reduction, and finding that while she was in this position an abnormal (abdominal) presentation was spontaneously converted in to a normal one. Having reflected on this circumstance, I was induced a few weeks later, when called in consultation in a bad shoulder presentation, to try *position* as a means of rectifying it. I was very anxious in regard to the case, because the lady had lost three children already from 'turning to deliver' in shoulder presentations. Her regular attendant, Dr. G. N. Dox, of Geneva, New York, a physician of attainment and experience, happened to be the *confrère* in whose practice the case of prolapsed cord, above referred to, had occurred; and instead of 'turning' himself, as had been so unsuccessfully attempted in the lady's previous labours, he sent for me in consultation. Remembering the fate of the other children, and finding this one very large, I suggested the feasibility of correcting this *shoulder presentation* in the same manner as I had corrected the *abdominal* in the first instance. With his consent I made the effort in the following manner:—I folded several quilts compactly, laying them one upon another to the height of about one foot, and assisted her to kneel upon the quilts, with her head and shoulders resting upon the bed, and her face forwards, so as to bring her body to an angle with the bed of nearly 90 degrees. I then pressed my hand gently against the shoulder, which readily receded, until I was enabled to clasp the vertex with my fingers, and with the assistance of the next pain to so 'engage' it, that, when the patient was placed upon her left side and the quilts removed, a perfectly natural presentation presented itself. In a few hours the labour terminated in the delivery of a healthy boy, weighing ten pounds. Only a few moments were occupied in the process, and subsequently experience convinces me that *shoulder presensentations* can generally be converted in this way into *natural* ones, without a resort to 'turning,' and with no risk for the mother or the child."

I would add that this method of treatment has received much attention in America, and that no inconsiderable amount of testimony has been accumulated in support of its efficacy. Dr. Maxon also informs me that he submitted his views in this regard some years since to Sir James Simpson, and that they were cordially endorsed by that distinguished gentleman.—*Lancet.*

MEDICAL ASSOCIATION.—TRIP TO COUCHICHING.—On the morning after the adjournment the members of the Association, and their ladies, were taken by the profession of Toronto and vicinity through the threshold of the beautiful chain of lakes stretching from Belle Ewart to Rosseau. Through the kind courtesy of Mr. Cumberland, a special train, with parlour cars, was provided, leaving Toronto at the much more comfortable hour of 8.30 a.m. The day was very warm, and the run in the boat was thoroughly enjoyed and appreciated, as was also the beautiful scenery of Lakes Simcoe and Couchiching. Whilst dinner was being prepared, the members of the party distributed themselves through the grounds of the Couchiching Hotel, and some were off the grounds for a new refreshing plunge in the waters of Lake Couchiching. The return in the cool of the evening was even more enjoyable than the morning's trip. The "special" overtook and passed the regular train, arriving in town about fifteen minutes ahead of time, after one of the best trips on the road. On the way home it was resolved that the thanks of the profession should be conveyed to Mr. Cumberland, the manager of the road, for the kind thoughtfulness manifested in the arrangements made by him.

Translations.

Catheterization of Bartholini's Glands.

Notes by Dr. A. Breda, assistant to Professor Carlo Rosanelli.

(Translated from the Gazetta Medica Italiana.)

It is well known that these glands often become the seat of painful inflammation as a result of the first post-nuptial rites. The inflammation may spread from the vestibule to the ducts, to the bodies of these glands, and to the connective tissue surrounding them, and give rise to abscesses, fistulæ, and cysts. In Dessault's journal, a case is reported of a tumour formed from one of these glands being confounded with hernia. According to the latter, it is "not always easy to distinguish mucous cysts of the vulvo-vaginal gland from serious cysts developed in the meshes of the cellular tissue, in the canal of Nuck, or in an old hernial sac." Zeissi believes these glands are often affected, and confesses, with honest frankness, that in some cases they never heal.

Assuredly, phlogosis of such glands proceeds for some time without any objective alteration, and tends mostly, especially when the body of the gland is affected, to suppuration. The woman's modesty, whim, or interests may present to the practitioner difficulties both in diagnosis and treatment. If not, embarrassment in the diagnosis rarely occurs, and the cure can be made with sufficient confidence, when suitable and energetic treatment is employed, as in diseases of the lachrymal passages, for example.

The glands of Bartholini have several times been presented to us in a diseased condition. Two women, after an attack of vulvitis, showed redness at the orifice and catarrh of the duct of the left gland. Squeezing out, several times a day, of the material which accumulated there, and then to force injections of a weak solution of nitrate of silver into the canal, held closed by the finger, banished the redness and discharge in a week.

Another woman, admitted with condylomata at the vaginal orifice and catarrh of the excretory duct of the left gland, was treated by injections into the canal and repeated catheterization of it. Little by little it dilated more than was expected; at last, there appeared at the orifice a red shining tumour, about the size of a hemp seed, which was considered a condyloma. This was attached to the upper wall of the canal about one-fourteenth of an inch from the orifice. So far as I know, condylomata in this situation have not been described by anybody.

In a case of cyst of the left labium majus, following phlogosis of the gland of that side, with paracentesis through the mucous membrane of the vestibule, there came out about ten drachms of chocolate-looking fluid. After the operation menstruation came on, and the opening closed; and then, in little more than a week, the tumour gained in volume, to arrive at which seven years had before been necessary.

Another woman had a similar tumour on the substance of the right labium, a deep vertical incision, the whole length of the tumour, was made, and about an ounce of liquid, principally purulent, escaped. By a finger in the cavity, it was found to be rounded, without any recesses, enclosed by a thick, rough wall. The wall having been separated from the margins of the wound, a portion, the size of two cents, was cut away, and the rest scraped with a spoon; the cavity was filled with cotton soaked in phenic acid. The cyst was subsequently cauterized and healed up.

A prostitute was discharged cured of vaginitis; twenty-one days after she came back with valvo vaginal catarrh, with two erosions near the orifice of the left gland. The lower part of the labium was somewhat swollen. After four days she was seen again, and the labium was so large as to partly overlap that of the other side—it was about the size of a pigeon's egg, no fluctuation was detected. Pressure gave great pain, but did not expel any fluid.

In this condition, a small silver probe, very thin in the shaft, slightly curved with the convexity upward. Little by little, it was made to advance about two-thirds of an inch, and on withdrawing it, there escaped about five drachms of pus, almost pure, thick, uniform. It came out without any force, indeed, had to be pressed out. The redness and pain disappeared, and the swelling became somewhat less. The catheterization was practised four days; on the five succeeding days, weak solutions of ni-

trate of silver were injected into the gland, which thus became sound, and the erosions (on which simple cotton had been kept) disappeared.

A similar case occurred during the last few days. From all this it seems that we may conclude :—

1st. That inflammation of the duct is often followed by that of the body of the gland of Bartholini.

2nd. That the latter has a strong tendency to suppurate, with difficulty of outlet.

3rd. That antiphlogistics frequently come too late.

4th. That for maturants, one should substitute, mostly, evacuation by catheterism.

5th. That this operation causes little pain, shortens the duration of the disease, does not deform, and, what is of more importance, does not destroy the function of the gland, and is to the gland itself a prophylactic measure.

Besides astringents and catheretics in liquid form, their use in solid form, and the progressive dilatation of the excretory duct, ought to be taken into consideration.

Bruit de Souffle of Pregnancy.

(Translated from the Paris Medical.)

At the Academy of medicine, Prof. Depaul has undertaken to refute the opinions of Messrs. Bouillard and Glénard on the seat of the uterine *souffle* of pregnancy. We have spoken of this *souffle* in No. 37 of this Journal, and we were the first to call attention to the fact that an artery so small as the epigastric, could not give rise to a *bruit* so loud as the uterine *souffle*. We added that M. Glénard had boldly attributed to the episgastric that which comes from the iliac. The *Gazette Hebdomadaire* and the *Journel des Connaissances Medico-Chirurgicales* have both brought forward the same objection to M. G.'s theory. But as M. G. has himself renounced his idea, there will be no more question of the uterine *souffle* being epigastric. M. Depaul himself presented to the Academy a preparation of the epigastric artery to show the small volume of this vessel compared with the intensity of the *souffle*.

M. Depaul next combats the theory of M. Bouillard, according to which the *bruit* would be situated in the iliac arteries, in which we agree with M. B.

M. Depaul, who places the seat of *souffle* in the arteries of the substance of the uterus, cites in support of this theory, a case of Dr. Rapin, of Lausanne, who states that he caused the uterine *souffle* to cease by compressing with his fingers, the arteries of which he felt the pulsations on the inner side of the neck of the uterus.

There is here an evident mistake, for it is impossible to admit that compression of the arteries of the neck (those which are accessible) can influence the circulation of the sides of the uterus, because these last receive two arteries of considerable volume, and inaccessible to the finger, the utero ovarian. We say, moreover, that if M. Rapin caused the *souffle* to cease by internal compression of the neck, it proves that the *bruit* is not situated in the arteries of the uterine walls which have no relation to the neck of the uterus.

M. Depaul declares his intention of auscultating the uterus of a woman at the moment of opening the abdomen in the operation of cæsarian section. It seems to us that this will prove nothing for or against M. Bouillard's theory. We do not believe that the compression of the iliac arteries by the uterus would be sensibly diminished by section of the abdominal walls. M. Depaul makes the following objection to M. Bouillard's theory. It is by no means rare to observe the uterine *souffle* one, two, or three days after delivery. M. Bailly has verified this opinion in 68 out of 78 labours, 15 times on both sides ; 13 times on the right, and 26 times on the left side. In the cases when the *souffle* was heard on the left side, the uterus was inclined to the right.

If this deviation was not proved at the autopsy, what can be its signification ? Cannot a uterus, still large from the first to the third day after labour, present an irregular and abdominal augmentation of volume on the opposite side to its deviation, and thus compress the corresponding iliac arteries ?

We still hold to the opinion that the uterine *souffle* is situated in the iliac arteries.

Arsenic and its Antidotes.

M. Rouyer, assistant to Prof. Teltz, of the Faculty of Medicine of Nancy, has just published an excellent article, the aim of which is to discover what is the smallest dose of arsenic capable of destroying life, and what the effects of the antidotes recommended This work is the result of numerous experiments, performed in the laboratory under the supervision of Prof. Teltz. These are the practical conclusions arrived at by M. Rouyer :—

I. Arsenious Acid.—A. *Introduced into the blood.*—1st. Very small doses suffice to cause symptoms of poisoning to appear. Gramme 0·0006 to each kilogramme in the weight of the animal (A. grain 0·00926 to every $2\frac{2}{3}$ lbs., Troy weight.) 2nd. Grave symptons of poisoning, and sometimes death, take place when gramme 0·0023 per kilogramme (A. grain 0·0354 to each $2\frac{2}{3}$ lbs., about) is injected into the blood. 3rd. Death is certain when the dose absorbed reaches grains 0·046 to $2\frac{2}{3}$ lbs. 4th. Death takes place in the space of from 24 to 35 hours when grains 0·0385 are given, and in 8 hours when the dose is 0·046.

B. *In the stomach.*—1st. Grains 0·926 of arsenious acid in solution to the kilogramme ($2\frac{2}{3}$lb.), the weight of dogs, injected into the stomach, is enough to cause death in nearly all cases. 2nd. The dose of grains 1·08 to the kilogramme is certain to cause death. ·3rd. If poisoning supervened only on administration of a stronger dose, it was much more rapid, and this being relative to a particular condition in dogs, which throws off the poison too quickly. 4th. In poisoning by the average dose of grains 0·926, death ordinarily takes place at the end of 24 hours.

II. Arseniate of Soda.—A. *In the blood.*—1st. The true poisonous dose is grains 0·077 to the kilogramme. 2nd. Below this dose, grave symptoms appear without always causing death. 3rd. The duration of these symptoms is from 12 to 20 hours.

B. *In the stomach.*—The dose of grains 2·3 [?] brings on symptoms of poisoning, but does not always cause death, which, when it does, takes place from 24 to 30 hours after.

III. Arsenate of Potash. A. *In the blood.* 1st. The poisonous dose is grs. 0.046 per kilogramme. 2nd. In this case death supervenes at the end of seven hours.

B. *In the stomach.* 1st. The poisonous dose is grs. 0.46 per kilogramme, takes place in from 6 to 7 hours.

Antidotes of Arsenic. *(a.)* Hydrated sesqui oxide of iron recently prepared (gelatinous and brown) is an antidote for arsenious acid, but not for the arsenate of potash, nor for the arsenate of soda. (*b.*) At a longer interval than an hour it is useless to attempt recovery from poisoning by arsenic. (*c.*) For arsenite of potash, and arsenite of soda the author proposes perchloride of iron in conjunction with magnesia. (*d.*) The mode of administration is the official solution of perchloride of iron, and a half an hour after magnesia in the proportion of a drachm to $2\frac{3}{4}$ ozs. of perchloride. (*e.*) This perchloride of iron and magnesia are also an antidote for arsenious acid. Therefore, it is preferable to employ it always in cases of poisoning by arsenic or its compounds. *(f.)* An hour after the administration of an antidote, it will always be well to employ a purgative, in order to expel the ferrated arsenite which is formed, and as this arsenite is soluble in acids, to avoid acid drinks and lemonades.

A New Method of Disposing of the Dead.

The dead trouble the living. M. Cruls, ex-officer of the Belgian Engineers, and at present Engineer to the Brazilian Government, proposes a new mode of inhumation ; viz., incrustation. Each body is to be encased in artificial stone, which would not allow the escape of liquids or of gas. These blocks, each containing a dead body, would serve to construct mausoleums, monuments of divers forms, which would cover the cemeteries. Each block would cost five francs.

There may be some good in the idea, but one cannot help asking, what would be done with all these blocks of stone when they accumulated in great numbers? If all the dead of Paris were placed in the same cemetery, there would be about 1,000,000 in 22 years, taking 800 as the average rate of mortality per week.

Treatment of Sympathetic Ophthalmia.

(Translated from the Paris Medical.)

Dr. Boucheron read a paper before the Society of Biology [!] in Jan., 1876, in which he proposes to replace enucleation of the globe of the eye, by section of the ciliary and optic nerves at the back of the eye. Here is his method :—

Between the external and superior rectus muscles at a centimetre (about 4½ lines) from the corner, he divides the conjunctiva and Tenon's capsule and, with a pair of curved scissors, penetrates between the capsule and the eye. Then drawing forward the globe of the eye, seized near the corner by strong clawed forceps, he stretches the optic nerve, which feels a rigid cord beneath the scissors. The optic is divided and likewise the ciliary nerves and arteries, by means of slight touches of the scissors. A little hæmorrhage is produced, but is easily arrested by gentle compression of the eye.

When the section of the optic and ciliary nerves is achieved, he enlarges the opening in the capsule, and, by the aid of a second pair of clawed forceps, seizes the sclerotic in the posterior hemisphere in front, and this brings to view the section of the optic nerve. Any of the ciliary nerves which escaped section can now be easily divided, as they form a circle around the optic nerve.

He avoids severing the insertion of the recti muscles, in order to spare the anterior ciliary arteries, twigs of the muscular arteries, which again are given off from the ophthalmic. There is thus no hindrance to the establishment of the circulation in the eye by the anterior vascular system. And, morever, in sparing the recti muscles, the eye retains its position and normal movements.

Indications for the operation. This operation can be substituted for enucleation in all cases, at least when suppuration of the eye is not certain. But above all, the great advantage of this operation is the power of applying it in a preventive manner. The International Ophthalmological Congress of 1872 has accepted its principle, that the enucleation of a wounded eye ought to be performed immediately, if we wish to avoid attacks, often irremediable, of Sympathetic Ophthalmia. This radical and terrible means has not entered into general use.

"We hope (says Dr. Boucheron) that this operation, so simple, so inoffensive, and so conservative, which we propose, will in many cases render important services, both to the sufferer and to the practitioner." Assuredly the operation proposed by Dr. Boucheron appears preferable to enucleation of the eye if the results are considered, but is our *confrère* certain he can stop sympathetic ophthalmia by these means? We would have liked to find in this communication, either observations or experiences which would prove that the section of these nerves would suffice to stop the propagation of sympathetic ophthalmia. If the eye continues to be nourished by these anterior ciliary arteries, it is probable that they carry to the globe of the eye filaments from the great sympathetic.

On the Movements of the Brain.

Extract from M. Salathes' paper, read before the Academy of Sciences, Paris, June, 1876.

(Translated from the Paris Medical.)

Having trephined in the skull of the animal an aperture of two centimetres in diameter, he applies to the opening thus obtained, a tube of glass of the same diameter, the lower part of which is held in place by means of a little fixture of brass furnished with a screw. This tube is closed above by a stopper of caoutchouc, traversed by a small glass pipe which terminates in a little piece of caoutchouc tubing, communicating with a lever drum. Liquid is poured into this apparatus in such a manner that its level corresponds to the middle part of the smaller glass tube. In this way the finest oscillations of the liquid are seen by means of the indicator of the drum, which marks them on a registering cylinder, on which he can note at the same time the tracing of the respiration or of the heart.

(1) The oscillations of the liquid as regards respiration, feeble and sometimes absent in calm breathing, become very pronounced during violent efforts, shouting, etc. (2) The respiratory oscillations observed simultaneously at the skull and at the spine, are synchronous. (3) Artificial respiration reverses the order of the oscillations, the liquid rising in respiration and falling in expiration. (4) The oscillations depending on the cardiac systole, which can be in

part or completely hidden in the case of exaggerated breathing, give a tracing similar to that of the pulse. (5) Different postures have a great influence on the intra-cranial pressure, which is shown by the marked change in the level of the liquid, which rises considerably when the hinder quarters of the animal are raised, and falls when they are lowered. (6) Anæsthetics modify the phenomena in two ways, either in abruptly suppressing the respiration, and as a consequence, the oscillations depending on it, or by suppressing these last and equalizing the respiration.

Intra-Uterine Suture.

(Translated from the Paris Medical.)

Dr. Earnest informs us that, after labour lacerations are produced in the neck of the uterus, the consequences of these, though very important, have not, as yet, attracted the attention of medical men. The edges of the wound separate and curl outwards, forming a sort of ectopy. From the separation of the edges of the lacerations result: Profuse leuchorrhœa; abundant menstruation, and at last, general pains. The Dr. treats these lacerations as follows: He closes the fissures by means of deep sutures, taking out the stitches the eighth day. The results are very satisfactory.

For our part we are not afraid to say, we do not believe in the possibility of the application of a suture in the neck of the uterus, and furthermore, do not believe in the importance of these intra-uterine lacerations, and we ask the author how he has been able to verify the existence of lacerations in an unexplorable region.

A return made by Mr. Simon states that the following reports are in preparation with a view to their being laid before Parliament:—Two reports by Dr. Klein on the intimate morbid changes occurring in scarlet fever, and in the enteric fever in swine; a further report by Dr. Sanderson on the process of fever, particularly with reference to the constitution of the pyogenetic ferment in septic infection; a further report by Dr. Creighton on anatomical studies with reference to cancer; and a further report by Dr. Thudichum on the chemical constitution of the brain.

THE CANADIAN

Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

To Correspondents.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, SEPTEMBER, 1876.

THE CANADIAN MEDICAL ASSOCIATION.

It may be wondered, in view of the value of the papers read at the meetings of the Association, and of the remarks elicited from some who took part in the discussion of them, and of the interesting nature, scientific and social, of the whole proceedings, why we should have to try and beat up a larger attendance of our medical brethren.

It unfortunately happened, shortly after the formation of the Association, that certain questions of medical politics were introduced at its meetings, and these so engrossed the attention of members that practical and scientific papers were almost shut out. Besides which, the discussions resulted in a certain amount of bitterness and sectional feeling, and altogether had a most pernicious effect upon the Association, and the objects for which it was formed. Some two or three years ago, however, the members of the Association saw the mistake that had been made, and resolved to lay such questions aside, and since that time the character of the meetings has again changed, and valuable papers are being written and read at them. There is surely no profession or calling that has before it so vast and noble a field for constant and painstaking observation, thought, and research, nor is there any art or science of which the cultivation and advancement is so important to the human race. What powerful agents such Associations are, and how much more powerful this Association may become, in developing this culture and pushing on this advance, is well set forth in the portion of the late President's

address, which we have given *verbatim*. They are the highest schools of mutual instruction in medicine, and to them members come, to impart the results of their own thought and observation, and carry away with them an additional stock. It may be said that we can do just as much at home, but this is not the case, for views may need to be criticised, compared with those of other authorities, either present or absent, and corrected, and learners may want to get further light on some obscure point, or elicit from the investigator something he has not thought of writing, and may, in so doing, suggest to him some new point. Thus in a few hours a subject goes through a sifting process which would take months, and even more, of scattered reading to accomplish otherwise.

We would like to see each member come fully alive to his responsibility as a co-worker in the grand aims of the medical profession, and large numbers of them with something new and important to impart, put in the briefest form, compatible with justice to the new fact or new form of putting it. In this way each, while doing what is really his part in a great work, would be fully alive to the great value of the time at the disposal of the Association, and while imparting knowledge when he had it, would refrain from wasting the time of himself and others by saying in many words what has been said over and over again, or bringing forward facts well and generally known. It might, possibly, be well if those intending to read papers would, a few weeks beforehand, send to the journals the title of their papers, so that others could be ready to compare notes.

The Association is not the exclusive property of any one man, or of any set of men; if, therefore, something is done, or left undone, to the displeasing of any member, let him not on that account remain away, but if something has gone wrong, let him use his influence to set it right, and let him try *first* to do it calmly and quietly, and not suppose that the misdeed has been done purposely against him. At the recent meeting there was a scarcity of the names of members from the country places on the list prepared by the nominating committee. This, we believe, was entirely due to inadvertence, and to the fact, that the more isolated men are apt to be overlooked, even by one another, than those with whom we come in daily contact. Had the gentlemen who drew attention to the circumstance, considered the matter from all points of view, we think they would have agreed with us and approached the matter in a milder way.

We hope to see at the future meetings of the Association a still further increase of members, good-fellowship, and usefulness—a constant pushing on to the goal as successive years go by.

MINERAL WELLS OF TORONTO.

As many persons in this city are very proud of the possession of so-called mineral wells, we take the liberty of placing before our readers an analysis of the water of one of them, kindly furnished by Mr. Hayes, of the School of Practical Sciences, merely saying that the well in question is connected with a block ef new stones recently erected and owned by one of our most prominent aldermen, and that we are attending, at the present time, in the family who occupy the premises, one case of typhoid fever, one case of dysentery, and two cases of diarrhœa, with more than usual gastric disturbances and prostration.

Mr. Hayes says (what would strike anyone at a glance) that the water is altogether unfit for drinking purposes. His report is:—Total soluble matter, per gal., 153 grs.; chlorine, 18·5 grs.; free ammonia, parts 1,000,000, 1·12 grs.; albuminoid ammonia, ·36 grs.

The young man who has the fever, was in the habit of drinking larger quantities of the water thus contaminated with sewage, than other members of the family, under the impression that the more he drank the better it would be for him.

Medical Association.—Entertainment by Mr. and Mrs. Bickford, at Gore Vale.—After the adjournment of the annual meeting, the members of the Association availed themselves of the kind hospitality of Mr. and Mrs. Bickford, at an "At Home," given by Mrs. Bickford at Gore Vale. The grounds were abundantly illuminated with Chinese lanterns,

whilst the moon seemed to shine her loveliest for the occasion. The drive up the long avenue of lofty spreading trees, hung with lamps, was very pretty; but when sauntering by rustic steps, paths, and bridges, down the slope, across the stream and round the little lake, in which were reflected the house, conservatory, and innumerable coloured lights—whilst the sounds of distant music, mingled with the plashing of the water came floating in the air—one could almost imagine oneself back amid the fairy tales of years gone by. From this, however, we were soon awakened by a noble appeal to the sympathies of the inner man; and this and other like pleasing duties being gone through with, we took our leave after spending an extremely pleasant evening.

PASS AND PLUCK.

We cull a few items of interest to Canadian medicoes from the Report (*Med. Times and Gazette*) of the Court and Board of Examiners of the Royal College of Surgeons, England, for the year 1875-76, showing the number who have passed and have been rejected from the various medical schools during that period :—

Primary Examinations.

Medical School.	Totals.	Number passed.	Number plucked.	Percentage of rejec'ns.
St. Bartholomew's	98	73	25	1 in 3·96
Guy's	87·50	60	27·50	" 3·18
University College	78·50	45	33·50	" 2·34
St. Thomas's	57·50	35·50	22	" 2·61
London	48·66	20	28·66	" 1·70
St. George's	33·00	20	13	" 2·53
Edinburgh	19·66	13	6·66	" 3·05
Dublin	11·83	6·66	5·50	" 2·15
Toronto	8·50	7·50	1	" 8·50
Glasgow	5.50	3·50	2	" 2·75
Montreal	3	3	—	" 0·00
New York	2·50	—	2·50	" 1·00

Pass Examinations.

University College	78·91	66·58	12·33	1 in 6.39
Guy's	77	59	18	" 4.37
St. Bartholomew's	63·75	49·75	14	" 4·53
St. Thomas's	41·41	35·58	5·83	" 5·10
St. George's	27·50	22	5·50	" 5·00
London	21·50	16 50	5	" 4·30
Edinburgh	17·50	14	3·50	" 5·00
Dublin	5	2	3	" 1·66
Toronto	4·66	2·83	1·83	" 2·54
Glasgow	3	1	2	" 1·50
Montreal	1·33	1·33	·00	" 0·00
New York	·50	·50	·00	" 0·00
From 31 Schools, Primary Examinations. Totals.	700	443	257	1 in 2·72
From 33 Schools, Pass Examinations. Totals	498	377	121	" 4·11
From Canadian Schools, Primary Examinations. Totals	—	—	—	" 11·50
From Canadian Schools, Pass Examinations	—	—	—	" 3·27

An exhibit of which we have no reason to be ashamed.

Book Notices.

Medical and Surgical Memoirs, 1855-76. By Joseph Jones, M.D., Prof. of Chemistry and Clinical Medicine, University of Louisiana. Vol. i.

This volume "relates chiefly to diseases which are confined more or less to special anatomical divisions of the human body, as the nervous, circulatory, respiratory, and osseous systems," and exhibits on the part of its author a most indefatigable zeal in research and collection of material, and does really contain a large amount of useful, interesting, and amusing matter, with a great deal that does not appear very relevant to the subjects treated of, but all mixed up in the same chapter in such a way as to constitute a most delightful medley.

The chapter devoted to "investigations on the nature, causes, relations, and treatment of traumatic tetanus," consists of 266 pages, and embraces a full account of *all that has ever been written on that subject*, a pretty full account of the various theories of epilepsy that have heretofore prevailed throughout the world, long reports of cases of insanity, an account of Sir Humphrey Davy's cure of paralysis by the thermometer bulb under the tongue, Prof. Woodhouse's experiment of producing all the effects of nitrous oxide by the administration of pure air, besides reports of cases of paralysis and syphilitic lesions of the brain, with nearly six pages of very small type, embracing an account of witchcraft as it existed in the West Indies prior to 1760, and an account of Perkinism and other delusions, most of which were to be found in Dunglison's Therapeutics twenty years ago, but which, as far as we can see, have no very obvious relation to "traumatic tetanus."

The author has utilized the material furnished by the civil and military hospitals of the South during the late civil war, and has, no doubt, produced a work that will prove of service to the profession there.

His chapter on Spinal Meningitis, which appears to have been rather prevalent in the Confederate army, as well as on the plantations, is very interesting, both in regard to the general history, and the *post mortem* appearances of the disease. The author gives a synopsis of the

treatment pursued by every one who has ever written about it, but appears to favour general blood-letting in the beginning of most acute cases, a practice in which he has few followers among Northern practitioners at the present day.

To a person who has the time and patience to separate the wheat from the chaff, these memoirs will afford a considerable amount of information and amusement, but the volume before us reminds one of a very old man trying to tell his grandchild all the incidents of his long life, during an evening's chat.

We hope the two succeeding volumes will be more condensed and practical, and not have their otherwise really beautiful pages sullied by making them the vehicle for the distribution of a defence of that blot on the civilization of our age, " the military prison of Andersonville and its fiendish commandant, Wirz."

Orthopedic Surgery — Deformities of the Lower Extremities. By Van S. Lindsley, M.D. Read before the Medical Society of Tennessee, April, 1876.

A Clinical Lecture on the use of Plastic Dressing in Fractures of Lower Extremity. By David W. Yandell, M.D., Prof. of Surgery, University of Louisville.

Notes on Syphilis in the Insane. By Julius Mickle, M.D., Medical Superintendent, Grove Asylum, London.

Gastrotomy and Gastrostomy. By J. H. Porley, M.D., Professor of Surgery, Starling Medical College, Columbus, Ohio.

Easy Method of getting rid of the Mucus Adherent to the Neck of the Uterus.—By Prof. Pagot.—*(Translated from Paris Medical.* Dip a brush of lint into the yolk of a fresh, raw egg. Stir it in the mucus, throw a little water once or twice into the speculum, still gently stirring the lint, then draw off the water, and dry the neck of the uterus. It is then found to be so completely wiped that it appears to be cleaned of all secretions.

Meetings of Medical Societies.

CANADIAN MEDICAL ASSOCIATION ANNUAL MEETING.

The ninth annual meeting of the Canadian Medical Association opened at ten o'clock, on the 2nd ult., in the Council Chamber, City Hall, the President, Dr. Hodder, occupying the chair. The first business taken up was the reception of new members.

The following gentlemen were elected : Drs. Graham, Playter, Grasett, Barrett, F. Wright, Buchan, Agnew, Robertson, Greenlees, and Reeve, of this city ; Dr. Tye, Thamesville ; Dr. A. Macdonald, Guelph ; Dr. Moore, Brampton ; Dr. Osler, Montreal ; Dr. Howland, Huntsville, and Dr. Strange, of Aurora.

Dr. Cowan, of Hamilton, and Dr. Abbott, of Chatham, presented themselves and were received as delegates.

The Association adjourned till two o'clock.

AFTERNOON SESSION.

The President took the chair at two o'clock, there being a large attendance of the profession, among whom were several prominent medical men from the United States. Drs. White and Brush, of Buffalo, were introduced to the Association, and cordially invited to take part in the proceedings.

Dr. White, in acknowledging the compliment, referred to the importance of mutual conference and association between medical men and the fact that the practice of medicine was cosmopolitan. He trusted that more intimate relations would in future subsist, not only between city and country practitioners, but between the medical men of the United States and Canada.

The following members were then elected :— Drs. Graham, Reed, Hagel, J. S. King, J. Carroll, Britton, Toronto ; J. Rosebrugh, Hamilton ; Robertson, Milton ; Philip, Watertown.

THE PRESIDENT'S ADDRESS.

Dr. Hodder, as President of the Association, delivered his address. He congratulated the members on the interest they took in the Society as was evinced by the large attendance, and took this opportunity of offering a hearty welcome, on behalf of the medical men of Toronto, to the delegates from the United States, and invited them to join in all the discussions and debates, and to consider themselves in every particular as members of the Association. He alluded to the success that had attended the formation of medical societies, and the gatherings of medical men for scientific

purposes in other countries, and thought the results ought to stimulate the profession of the Dominion to meet in large numbers at the meetings of the Association. His remarks on this subject were so pertinent that we give them more *in extenso* :—

"When we consider the vast amount of practice and observation which is daily and hourly going on, not only in the larger cities but in the surrounding districts of the Dominion, we cannot but feel with regret that an enormous fund of valuable information and experience is and has been allowed to run almost entirely to waste for a long succession of years. By joining such an Association as that which I have the honour to preside over this day, the numerous body of our professional brethren extensively engaged as general practitioners, who spend long and active lives in the practice of their profession, would undoubtedly be able to contribute inexhaustible stores of medical experience of the highest interest and value, and which, but for such a society, would remain uncommunicated, and therefore lost to the profession. The local medical societies do some good, but the results of their meetings are rarely published, and therefore many valuable cases never meet the eyes of the profession generally, and are thereby lost to the world. There is, however, one point of very considerable moment to which I beg to draw the attention of the younger members of the profession :—Many young practitioners are deterred from publishing or bringing before an association or society cases of interest which occurred in their practice, from an erroneous supposition on their part that it is necessary to work them up into the form of an elaborate essay. In nothing are they more deceived ; the plain and truthful narrative of a single fact is of infinitely more value than a thousand theories. Wisely, then, did this Association when they met last year at Halifax limit the time for the reading of papers, by which, I trust, many members will be induced to send in communications which otherwise they might not feel disposed to do. It is only therefore in an Association such as this that the accumulated experience of a large body of the medical profession in this Dominion can be properly collected and concentrated, so as to turn such inestimable stores of knowledge to good account, and render them available and useful to the profession at large. When we glance over the medical literature of former years, not only of Great Britain and the Continent but of the United States—what, I would ask, are the works which have stood the test of time, and which among the numerous changes produced by improving and increasing knowledge are still "lasting monuments," while systematic and, for their time, learned works have long since sunk into oblivion ?—it will be found that those simple records of the experience of long lives, devoted with ardent zeal to the cultivation of medical knowledge, retain their value unto the present moment, and will doubtless continue to be consulted and referred to by succeeding generations, as mines of invaluable practical information. Now, if the practice of one man, as in the case of Hunter, Harvey, Smellie, and a host of others, can produce recollections of facts which have immortalized their names and conferred lasting benefits on every department of the healing art, how much more useful and important will be the combined efforts of hundreds of fact-collectors, concerning all the results of their practice and their observations, thrown into one great depository, viz : the Canadian Medical Association. If I have tired your patience, gentlemen, by dwelling too long upon what appears to me to be the great object and what will form the great strength and importance of this association, I mean the collecting of valuable facts on questions of medical and surgical practice and public hygiene, I beg your indulgence ; and yet there is another point which I must not omit, I mean the effect these meetings have on our social position. It brings together the members of the medical profession, it enables us to know each other, it binds us together with a social bond which must ever be not only a source of sincere satisfaction but of mutual improvement and advantage. The friction of different minds earnestly engaged in similar pursuits is peculiarly valuable, for it is scarcely possible for any man who has been moved by the same impulses, agitated by the same fears, excited by the same hopes, and elated by the same successes, who has felt the responsibilities, and experienced the hours of painful anxiety in the treatment of difficult and dangerous cases, not to derive consolation and benefit by consultation and communication with his professional brethren."

He then proceeded to allude to some of the new discoveries which had taken place during the year in the practice of medicine, surgery, and midwifery.

Among other matters he reported some cases in which Prof. Thomas had successfully transfused milk, an operation which was first performed by the President during the great cholera epidemic in this city, and with the most beneficial results. It was of great importance to remember that milk may be used as a substitute for blood in transfusion, for, besides being always more accessible, it

might, in cases of epidemic among the human family, be preferable, as we cannot in such a case be certain that the blood to be injected is free from the germs of the disease it is intended to combat.

The treatment of fibroids of the uterus by hypodermic injections of ergot was also alluded to, Dr. Hodder having found great benefit from it. The address concluded with a reference to the serious losses which the medical profession and the world at large had met with by the death of a very large number of distinguished men. Great Britain had lost Bennett, James Clark, Latham, Headland, Sir George Gibbs, Letheby, Donovan and many others. Germany had lost Prof. Franke ; France had lost Andral, Levain, Ballard, Duchesne ; while the medical ranks of Canada had lost Dr. Cole, of Clinton, Dr. Yates, of Kingston, and Dr. Beaumont, of this city.

In the remarks which followed the reading of the paper, Dr. Trenholme stated that the use of the injections of ergot had not yielded the same happy results with him ; and that in some cases when the fibroids had been inaccessible, he had with good result removed the ovaries to check their growth. In one case he had operated for their removal *per vaginam*.

After some further remarks a vote of thanks was tendered to the President for his address.

NOMINATING COMMITTEE.

Drs. Canniff, Thorburn, Trenholme, Robillard, Temple, Rosebrugh, Osler, David, Strange, and Zimmerman were appointed Nominating Committee.

It was moved and seconded that Dr. Philip, of Watertown, be elected a member. Carried.

CRIMINAL INSANITY.

Dr. Joseph Workman was then called on and read a paper with the above title.

This paper (being one of great practical importance to the public at large as well as to the profession) has already been published in full by the author in the secular press. We will merely say in brief that, among other points, it raised certain questions in connection with the "epidemic of crime," which has been raging in this province, its relations to insanity, and some of the causes which tended to increase and spread it. In dealing with the latter part of the subject the doctor read a severe lesson to those journalists who are in the habit of hashing up the most disgusting details to tickle the morbid tastes of their readers, and make their papers sell, and who thus excite the weak-minded, and incite the "imitative instinct" to the commission of crime. He also rebutted the self-assurance of certain of them who assume to know more about insanity, and in fact about any other subject, than those who may have made such subject a special study. He spoke, too, of the rash haste with which men whose sanity was a matter of doubt had been hurried to trial, and to the gallows, and that in opposition to scientific opinion. He also threw out some hints of value to the practitioner who may chance to find himself in the witness box, for example, that it is not the bounden duty of the witness to help furnish questions as well as answers, and that he must be in no hurry to answer till he gets a definite, intelligible question, one which will not leave his interrogator at liberty to misconstrue the answer.

The paper being one which will well repay perusal, we would refer our readers for a full report to the *Leader* of the 9th ult., or to the *Mail* in two consecutive numbers about the same date.

Dr. HINGSTON spoke in high terms of this valuable paper. In the course of his remarks he suggested that medical men should be shy of giving opinions in these *causes celebres*, except on such points as they were specially familiar with. In this way they would avoid throwing discredit on their own knowledge as well as on the opinions of those more specially versed on the points under discussion.

Dr. KINCAID, Peterborough, said he had noticed in a city paper a letter respecting the Fox case from a student of medicine, who was now a schoolteacher, the communication tending to lead the people to doubt scientific evidence on the subject of insanity. Dr. Workman, Dr. Dickson, and another medical man held that Fox was not insane, while the people of the locality, especially the clergy, held he was insane. The writer of the communication indicated that the result of the *post-mortem* examination was that evidence was discovered of disease of the brain ; but the certificate signed by the medical men present at the *post mortem* examination stated that Fox's brain was found to be perfectly sound and well developed, showing no organic disease leading to insanity.

After some remarks by other members, a hearty vote of thanks was accorded to Dr. Workman for his paper.

Dr. HORNIBROOK, Mitchell, said he thought the system which prevailed in France was the correct one. He would move, "That in the opinion of this Association it would be desirable that in all cases of alleged murder, where the plea of insanity is raised, the accused should be placed under the supervision of one or more experts, until the existence or non-existence of insanity is determined."

Dr. ROBERTS said the result of that would be

that the plea of insanity would be raised in every case of murder.

Dr. WORKMAN said he thought the contrary would be the result.

Dr. CANNIFF suggested that the resolution should be left as a notice of motion.

It accordingly stood over.

Dr. THORBURN remarked that Mr. Blake, when in the Ontario Government, had made a proposal that scientific matters of that kind should be dealt with by scientists. The matter was, however, allowed to drop.

AUDITORS' REPORT.

Drs. Oldwright and Trenholme reported that they had audited the Treasurer's books and vouchers and found them correct.

Dr. STRANGE then read a paper on

OVARIOTOMY,

In which he referred more particularly to the various methods of treating the pedicle, and exhibited the clamp and iron for the delete cautery, for which he seemed to have a preference.

Dr. WHITE, of Buffalo, was called for, and, in moving a vote of thanks for the paper, stated that his treatment of the pedicle varied according to the character of it, and the necessities of the case.

After re-assembling for the

EVENING SESSION

the paper was again under discussion, and a vote of thanks was accorded to Dr. Strange for it.

Dr. J. ROSEBRUGH, of Hamilton, then read a paper on

THE PHYSIOLOGY OF MENSTRUATION,

and produced specimens of membranes, cast off from the uterus of a patient of his while menstruating.

Dr. OSLER offered a few remarks on the subject, which then dropped.

VITAL STATISTICS AND PUBLIC HYGIENE.

Dr. CANNIFF moved, seconded by Dr. TRENHOLME, "That the following Committee be appointed to prepare a memorial to the Dominion Government with respect to vital statistics and public hygiene :—The President, Drs. Hingston, Workman, Clarke, Playter, Canniff, and Oldright."

Dr. RIDDELL thought the first question to be decided was whether the subject of vital statistics came within the scope of the Dominion Parliament or Provincial Legislature. In Old Canada a law prevailed calling for certain statistics to be made to the Board of Statistics, but one of the first acts of the Ontario Legislature was to do away with the obligation to send statistics to Ottawa and to provide that such should be sent to the officers of the Provincial Government.

After a great deal of discussion the motion was carried and the meeting adjourned.

SECOND DAY.—MORNING SESSION.

The following new members were elected :—Dr. Pollard, Dr. W. Metcalfe, Dr. McGregor, Dr. Bell, Dr. Sheppard, Dr. Brown, Dr. George Ross, Dr. Fuller, Dr. Garden, and Dr. Roddick, of Montreal; Dr Cobbett, Dr. Hodder, jun., Dr. Holmes, Dr. J. Frazer, Dr. R. A. Corbett, Dr. Baynes, and Dr. Wilkins.

VITAL STATISTICS.

Dr. RIDDELL laid on the table the various Acts with reference to vital statistics. He also produced copies of the schedule of registration of births, deaths, and marriages.

Dr. GEIKIE read a paper on a case of

GASTRIC ULCER AND SUPPRESSION OF URINE.

The patient, a young lady, having voided no urine for thirty consecutive days.

Dr. TRENHOLME, Chairman of Committee, read the

REPORT ON GYNÆCOLOGY.

In which the treatment of fibroids was taken up. As also some of the causes of uterine congestions and displacements, and reference was made to the effect of dancing just before, during, and after the menstrual period, to the exciting literature of our yonng girls, their late hours, and other bad habits. The chairman referred to some new instruments, some of which he exhibited later.

During the discussion on the paper, members expressed their appreciation of the manner in which Dr. Trenholme had always discharged his duties in connection with this committee.

The meeting then adjourned.

AFTERNOON SESSION.

The Association re-assembled at 2:15.

The following were elected permanent members : Drs. E. Baldwin, Archibald, Berryman, Pyne, Cobbett, Hodder, jr., Holmes, John Fraser, Robert Corbett, and Baines.

Dr. GRASETT read a paper on

ANTISEPTIC SURGERY,

Describing Lister's method, which elicited the usual discussion as to the relative amount of credit due to cleanliness and to carbolic acid, which has occurred at several meetings of the Association.

Two new features were, however, brought out by Dr. Grasett's treatment of the subject, more clearly

than we have seen it brought out before : first, that Lister did not maintain that carbolic acid in direct contact with a wound lessened the amount of suppuration, (rather the reverse), but that it must be applied as a sentinel at the opening of the wound to prevent the ingress of air laden with pyogenic germs ; secondly, Dr. Grasset gave a short history of the experiments and observations which led Lister to promulgate his " method."

A vote of thanks was tendered to Dr. Grasett.

The order of business was then suspended in order to receive the

REPORT OF THE NOMINATING COMMITTEE.

Dr. Thorburn submitted the report of the Nominating Committee, which, after certain suggestions by members, was passed as follows :—President, Dr. Hingston, Montreal ; Vice-President for Ontario, Dr. Workman, Toronto ; Vice-President for Quebec, Hon. Dr. Ross. Quebec ; Vice-President for New Brunswick, Dr. Bayard, St. John ; Vice-President for Nova Scotia, Dr. Moran, Halifax ; Secretary for Ontario, Dr. Zimmerman, Toronto ; Secretary for Quebec, Dr. Russell, jun., Quebec ; Secretary for New Brunswick, Dr. Herrington, St. John ; Secretary for Nova Scotia, Dr. Almond, Halifax ; General Secretary, Dr. David, Montreal ; General Treasurer, Dr. Robillard, Montreal.

Committee on Medicine—Drs. Ross (Montreal), Sweetland, and Mullin.

Committee on Surgery—Drs. Richardson, Oldright, and Kincaid.

Committee on Obstetrics—Drs. Ross (Toronto), Strange (Aurora), Rosebrugh (Hamilton).

Committee on Therapeutics—Drs. Fulton, D. Clarke, and Hornibrook.

Committee on Necrology—Drs. Osler, Graham, and Farrel.

Committee on Medical Education and Literature—Drs. Howard, Hodder, and Parker.

Committee on Climatology—Drs. Marsden, Bain, Playter, Rosebrugh (Toronto), Larocque, Canniff, De Witt Martyn, Botsford, Tye, and
(Halifax).

Committee on Publication—Drs. F. W. Campbell, Osler, and David.

Delegates to American Medical Association—Drs. Grant, Sweetland, Hingston, David, Fulton, Thorburn, Marsden, and Russel, sen. (Quebec).

Delegates to International Medical Congress—Drs. J. Ross, F. H. Wright, McDonald, Mallock, Grant, Brouse, Workman, Dickson, Osler, Williams, Craig, Russel, jun., Wickwire, Canniff, and Yeomans.

VOTE OF THANKS.

On the appearance of the Mayor a hearty vote of thanks was given to him and the Council for their kindness in lending the Council Chamber for the use of the Association. His Worship duly acknowledged.

Votes of thanks were also given to the various railroads and the Richelieu Navigation Company for the reduction of fares.

Dr. HINGSTON thanked the Association for the honour conferred upon him, and he expressed his intention of doing his best to meet the approval of those who had placed confidence in him.

The following new members were elected : Dr. Pyne, Dr. Berryman, and Dr. Archibald.

THE NEXT MEETING.

Dr. OSLER moved that the next meeting be held in Montreal on the second Wednesday in September.

The motion was carried, and a Committee of arrangements was appointed.

MEDICAL EDUCATION.

Dr. HINGSTON read the report of the Committee on Medical Education, to the effect that as the question of medical education was under the consideration of the Legislatures of Quebec and Ontario the Committee recommended that the education and examinations in the Provinces be the same, so that licentiates of one Province would have the privilege of the other Province.

The Dr. then moved, seconded by Dr. Canniff, the adoption of the

REPORT OF COMMITTEE

appointed last night to memorialize the Dominion Government in the matter of

VITAL STATISTICS,

which recommended the following as the substance of the memorial :—

The Canada Medical Association being of opinion that the sanitary laws at present in existence in the Dominion are insufficient to meet the requirements of public health, that a system of public hygiene must embrace an acquaintance with vital statistics, that the importance of that knowledge is recognized elsewhere, and that in countries not more favourably situated than Canada systems more or less complete of vital statistics obtain, and sanitary laws have been enacted and enforced ; the Association therefore pray that if it be within the scope and power of the Dominion Parliament such a comprehensive scheme be introduced as will supply a much-felt want and to the members of the profession throughout the Dominion, and other scientific persons, additional means of acquiring a more ex-

tended knowledge of the more prevalent diseases and establishing comprehensive laws relating to public health.

The motion was carried.

EXEMPTION FROM TAXATION.

A communication was read from Ald. Hallam asking the co-operation of the Association in petitioning the Legislature for the abolition of tax exemption. As it was shown that the subject was one which did not come within the objects of the Association the letter was laid on the table.

PAPERS.

The papers which were to have been read by Dr. Yeomans, of Mount Forest, and Dr. Oldright, were, at the request of those gentlemen, not read because of the lateness of the hour.

Dr. REEVE, Toronto, read an interesting paper on

OTOLOGY,

giving a review of the growth of this department of surgery, and the improvements in it to the present day. The paper was illustrated by the exhibition of a complete armamentum of otological instruments and a description of their uses.

After a few remarks by Dr. ROSEBRUGH, a vote of thanks was tendered to Dr. Reeve for his paper.

VOTE OF THANKS.

The President then left the chair, after which the thanks of the Association were, on motion of Dr. Sweetland, seconded by Dr. Workman, presented to Dr. Hodder for his conduct in the chair.

Dr. TRENHOLME moved the thanks of the members of the Association for the reception they had given to their visitors.

The motion was seconded and carried unanimously by the members.

On motion of Dr. WORKMAN, seconded by Dr. Roseburgh, votes of thanks were passed to the General Secretary, Dr. David, and the Treasurer, Dr. Robillard.

The Association then adjourned.

APPOINTMENTS.

J. B. Mills, M.D., of Springfield, to be an Associate Coroner in and for the County of Elgin.

J. Robinson, M.D., of Fort Francis, to be Commissioner, *per dedimus potestatem*, for the District of Thunder Bay.

Jas. B. Campbell, of the village of Belmont, Esq., M.D., to be an Associate Coroner, in and for the County of Middlesex.

Miscellaneous.

A Russian traveller, Colonel Prejevalsky, who has recently penetrated into the interior of Mongolia, has obtained most conclusive evidence as to the character of medicinal rhubarb. It seems settled, from his observations, that the root is that of Rheum palmatum.—*Chemist and Druggist.*

SALICYLIC ACID IN DIPHTHERIA.—Dr. J. Lewis Smith has within the past few months been testing the efficacy of salicylic acid to check the blood changes in diphtheria. The result of his observations is that it is obviously without avail, even in cases where there is tendency to renal complication and where it was supposed most good would result.

ALCOHOL.—A patient suffering from alcoholism stoutly refused to take bromide of potassium or any other "confounded medicine." Twenty grains were dissolved in a glass of milk, which he drank readily. Since then I find that twenty grains are entirely disguised by one ounce of milk. I have also found milk a very useful liquid to "wash down" salicylic acid wafers. It has always in my hands prevented the burning in the stomach which is so often produced when the acid is given in large and oft-repeated doses.

COMMINUTED FRACTURE OF THE ULNA; AMPUTATION; TREATMENT BY THE OPEN METHOD; OBJECTION TO IT.—A workman in a planing-mill received an extensive injury to the ulna and muscles by having his arm dragged within the rollers. On admission to hospital the ulna was found shattered to within three inches of the olecranon. Amputation at the elbow was performed by the house surgeon, Dr. C. P. Smith, and stump allowed to remain open. The case did well; but, when it was considered proper to bring the flaps together, it was found that they were too long, and a portion of them had to be removed. It would seem that one marked objection to the open method of treating stumps consists in the uncertainty of estimating the proper amount of flap to make in

order to guard against the contraction which will of necessity result. In the above case the mistake was on the safe side.

The Preservation of Ice at the Bedside. For some years it has been the practice of Mr. Sampson Gamgee to cut a piece of flannel about nine inches square and secure it by ligature round the mouth of an ordinary tumbler, so as to leave a cup-shaped depression of flannel within the tumbler to about half its depth. In the flannel cup so constructed pieces of ice may be preserved many hours; all the longer if a piece of flannel from four to five inches square be used as a loose cover to the ice-cup. Cheap flannel, with comparatively open meshes, is preferable, as the water easily drains through it and the ice is thus kept quite dry. When good flannel with close texture is employed, a small hole must be made in the bottom of the flannel cup; otherwise it holds the water and facilitates the melting of the ice, which is, nevertheless, preserved much longer than in the naked cup or tumbler. A reserve supply outside the bed-room door can be secured by making a flannel cup, on the plan above described, in a jug, and filling it with little lumps of ice; care being taken that there is space enough below the bag to allow the water to collect and leave the ice dry. This provision will allow ice to be used during the hottest night without the supply failing or the patient being disturbed—two very important considerations. The real therapeutic benefit of ice is only produced in some cases by its free use, and its soothing and stilling effect must be aided by the most perfect surrounding quiet.—(*Lancet*, June 10.)

Professor Koeberle, of Strasburg.—A correspondent of the *Allg. Wein. Med. Zeit.* (No. 20), gives some interesting particulars of this celebrated surgeon, to whom he recently paid a visit at Strasburg. He graduated with great distinction in that university, manifesting great proficiency in almost every branch of medical and surgical knowledge, and was soon appointed Professor of Anatomy. He is, in fact, a kind of universal genius, for it is difficult to name a branch of knowledge with which he is not acquainted. He is not only a good painter and sculptor, but also an excellent machinist and architect, and is as good a microscopist and chemist as he is a turner. For this last occupation he has a well-appointed workshop; and all the casts taken from the cases he has operated upon come from his own modelling-room. He manufactures, himself, most of the surgical instruments which he uses. His garden, which in the season produces fruits so early that they might seem to be grown in Algeria, is also his own work. The house which he has built is a model of house-building, and is adorned with sculptures from his own chisel. The 250 ovariotomies which he has performed since 1862, with almost incredibly successful results, are eminently his own work. It would seem incredible to those who have not seen him at work in his turnery, his smithy, and his studio, that such an amount of work could have been got through by the hands of a man who is scarcely fifty years of age, and who is in the receipt annually of 300,000 fr. for his ovariotomies and other surgical operations.—*Medical Times and Gazette.*

Reduction of Paraphimosis.—Alfred Eddowes, M.B. and C.M. (British Medical Journal), says:—"For the last two years I have been in the habit of reducing paraphimosis by the following plan: Take a strip of wet line about an inch or two inches wide, and envelop the glans and œdematous prepuce in it, allowing the lint to reach in front of the glans; then take a piece of elastic, the best being the ordinary round elastic ligature, and commence winding it round the glans from before backward. Adjusting the elastic evenly and firmly is easily managed, if the lint be allowed to reach beyond the glans in front, so as to give a starting-point for the elastic to catch hold of. If the swelling be very great, it is better to apply the elastic lightly at first, allow it to do its work, then pull it rapidly off and re-apply it more firmly. By this precaution all unnecessary pain is avoided, though a little more time is required. The great and even pressure of the turns of elastic very soon reduces the swell-

ing. If the elastic and lint be quickly removed, the glans will be found shrivelled up, and the prepuce readily passes over it. I have been induced to draw attention to this plan of reducing paraphimosis by those who have seen me employ it.—*Louisville Med. News.*

Injection of Quinine in Gonorrhœa.—Radha Nauth Roy, Assist. Surg., extols (*Indian Med. Gazette*, May, 1876) the efficacy of injections of quinia in gonorrhœa. He states: "I was once tempted to try it in a case of acute gonorrhœa, where scalding was unbearable, and discharge profuse, and to my utter surprise after the third day, I found the man quite relieved. He described to me the soothing effect of the injection as something cold like ice. The discharge was so much diminished that his clothes were scarcely stained after the third day. There was no more incessaut desire to void the urine, and he was to all appearance comfortable. My success in this case made me bold enough to use it in other cases, and I have invariably found the disease yield both in its acute and chronic stage under its influence. It acts as a tonic and astringent to the mucous membrane of the urethra. I have also used it in some cases of cystitis with much benefit. I generally use it dissolved in sulphuric acid dil. mixed with rose-water. Two grains of quinine sulph. dissolved in acid. sulph. dil. *m* viij or *m* x, and mixed with an ounce of rose-water—to be used twice for injection. At the same time I give copaiba mixture to my patients. In almost all the cases I have found it act like a charm. The disease is generally cured within a week, but chronic cases take a longer time. In a few acute cases it took more than a fortnight, but the delay in them was attributable to their irregular habits during ths treatment."

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TORONTO, OCTOBER, 1876.

Selections: Medicine.

THE DOMESTIC TREATMENT OF INSANITY.*

BY STANLEY HAYNES, M.D.

(From *The Practitioner.*)

The topic of these observations is one in which the majority of psychopathic physicians place little reliance, from the numerous difficulties met with in the satisfactory treatment of the insane outside of asylums; but there are many patients who can be efficiently attended to in private dwellings, other than their homes, thereby avoiding entry into an asylum, while the prejudicial influences of home treatment are escaped; and there are some cases in which removal from home is neither necessary nor proper, supposing the circumstances of the patients are sufficient to ensure the necessary care.

Dr. Yellowlees points out† that "insane patients treated at home are apt to get—1. *Too much narcotic medicine and too little general treatment;* 2. *Too much depression and too little support;* 3. *Too much confinement and too little open-air exercise,*" and says, "these unfavourable conditions are rendered still more so by—4. *Too much interference and too little tact.* . . Where such evils are really inevitable no one should undertake the treatment, and the sooner the patient is sent to an asylum the better; but they are not always inevitable, even when they seem so at first, and many insane patients can quite well be treated at home."

Much irritation is often produced in patients when they find they are not supported by their families in any orders they may give, and are not obeyed by their domestics; they find themselves watched, that those about them are suspicious of them, that their liberty is curtailed, that they are no longer free agents where they have been accustomed to do as they like. It often results that they become moody, fretful, suspicious, impatient, and revengeful, and resolutely refuse all kind offices and treatment; that they decline their meals, form strong prejudices—not to say hatreds—against those they have loved, and quietly watch for an opportunity of evading their friends or retaliating for their supposed wrongs. Removal from home and friends becomes necessary whenever strong antipathies are taken; the sooner the better, for all concerned. Insane antipathies are in inverse ratio to the former sane amount of affection, the revulsion of feelings being, too fequently, most marked: how often do we not hear of some unusually fond and affectionate husband and father killing his wife and children, and then attempting his own life, during a paroxysm of insanity?

By considering, briefly, the *classification* of insanity as delineated by Skae or Batty Tuke, we can, to a certain extent, estimate whether a given patient may be treated at home, or if he should be sent away. Taking the pathological nosology suggested by Dr. Batty Tuke as a basis, it will be found that his Class I, Idiocy, congenital or acquired, can, and should usually, be treated outside of an asylum for the insane, either at home, in some institution for imbeciles, or in poorhouses, according to the posi-

* Read before the Worcester Medical Society, 10th April, 1872.

† *British Medical Journal*, 5th August, 1871, p. 151.

tion of the patients. Moral imbeciles involve themselves and their friends in so many difficulties that it often becomes necessary to place them in asylums, where their deficient moral organization cannot act prejudicially on others. In his next Class—Idiophrenic Insanity—we find most of the dangerous patients, and, therefore, the largest number of those for whom asylum care is requisite. Sthenic idiopathic insanity, phrenitic or inflammatory insanity, general paresis, traumatic lunacy, and many cases of epileptic insanity, are so frequently accompanied by aggressiveness and destructiveness that the majority of those suffering from these forms of disease must be placed under asylum control. Asthenic idiopathic insanity very often needs asylum precautions on account of the melancholic tendencies of the patients inducing them to obstinate refusal of food and to suicide. Senile insanity can usually be treated at home, when the patients are above the pauper class, but poor ones are best attended to in asylums. Coming next to Dr. Tuke's third Class—Sympathetic Insanity—we find many cases of madness, due to epilepsy, ovarian and uterine changes, pregnancy, the puerperal state, and hysteria, which are much better treated out of asylums than in them (supposing the means of the patients are sufficient); while insanity originating in masturbation, pubescence or change of life (in either sex), and post-connubial insanity should be treated at home whenever it is possible, but the majority of those suffering from climacteric insanity are so suicidal, while some are also dangerous to others, that they cannot be treated safely outside of an asylum. In Class IV—Anæmic Insanity—are placed those disordered states of the brain consequent on starvation, fever, or lactation; these can, nearly always, be successfully managed at home. Class V—Diathetic Insanity—comprises the madness from tuberculosis and from syphilis: these demand asylum care in nearly every case. Class VI—Toxic Insanity—due to cretinism, delirium tremens, alcoholism, and opium, should not be sent into lunatic asylums for treatment, although it is at present often necessary to do so, from our urgent want of more suitable hospitals. I sincerely trust we may shortly have inebriate asylums, like those which have been so successful in the United States, for the reception, detention, and cure of cases of delirium tremens and alcoholism, and for "habitual drunkards" as defined by Mr. Dalrymple's excellent Bill, which deserves the energetic support of our profession and of all political economists. With regard to Class VII—Insanity due to metastasis, as from rheumatism, podagra, and cessation of long continued discharges—the type assumed by the cases must be our guide, as in all the other forms of mental disorder. In all of them we must be influenced by the homicidal, suicidal, or other dangerous tendencies of the patients. Sometimes powerful sexual feelings, and often the persistent refusal of food, render it highly advantageous that the patients should be cared for in asylums. Whenever the patient takes strong, unnatural dislikes to his relatives or those about him, or has delusions about his home, he requires to be removed to other persons and surroundings.

Half of the cases of mental infirmity are either produced or favoured by hereditary transmission. It is frequently found that disease passes over a generation or affects collateral branches of a family. As the danger of transmitting hereditary tendencies is much increased if one of the parents be insane at the time of procreation, it is our duty to prevent, as far as possible, all such chances of disease being propagated: hence there is the necessity of continence whenever insane patients are treated at home.

Intoxication in parents is a fertile cause of mental and physical imperfections; it is probable the larger proportion of criminality and lunacy in our poorer classes is, to a vast extent, the result of drunken parentage: this is a powerful reason for the restriction of drunkeness.

Prophylaxis.—When there is insomnia, more or less marked, with the sleep disturbed by distressing dreams, when we find exaggeration or impairment of sensations, inability to collect thoughts, and a feeling of confusion in the head, we must be on our guard; such a state often succeeds long continued watching and nursing, severe afflictions or disappointments, losses of property or position, intense mental application, long continued exertion or worry,

anæmia, excessive venery or masturbation, uterine functional disturbances, or any depressing disorders, and can frequently be cured at home by producing sleep and by removing the causes as far as practicable.

By careful watching for and treatment of nervous symptoms, and by attending to the general health, we may often prevent attacks of insanity, and many slight cases can be cured, without the patients having any knowledge of the object of our care.

In the treatment of insanity, sleep, mental rest, change of associations, (the absence of the two latter is the great objection to treating patients in their own homes), and easily digestible aliment, are the chief things to be held in view.

The etiology of a case under observation is the best indication we have for the kind of treatment most likely to be of benefit: hence it is that the history should be ascertained as fully as possible. When the malady is idiopathic medicines will be found to occupy a very secondary place to moral guidance; but when it is referable to abnormal physical causes it is evident our chief reliance must be in remedies which act on the unhealthy organs. Many cases appear to be produced by moral influences which have been originally due to physical disorders: nothing is known of the latter because the patient has lost the consciousness of them.

We require to be watchful in the treatment of all patients who become demented; their nervous sensibility is so deficient that dangerous disease frequently does not cause any reflex actions or indications of its presence.

In treating insanity it is expedient to bear in mind that a considerable proportion of patients, when they become better, remember all that occurred to them and was said in their hearing during maniacal attacks.

Moral treatment is difficult to describe. It consists of all those means calculated to soothe the irritable, calm the violent, cheer the melancholy, and rouse the demented. Exercise is absolutely necessary. The maniac should have abundance of space and air; if he be violent and destructive he can often be quieted by having something to pull to pieces.

Delusions must not be combated. Argument on them only serves to fix them in the patient's belief. They can be listened to for a little and their expression replaced by gradually changing the topic of conversation to a more healthy one. A patient should not be led to express any delusions or to suppose they are sneered at, or amusing, or not believed in, and they should never be spoken of to other patients. The patient should be offered some useful occupation, and stimulated to the exercise of healthy thought. Delusions are frequently referable to physical states, *e.g.* a patient with abdominal disorder often believes he is full of devils, serpents, glass, whales, &c. So that their expression leads us to investigate their source.

The practitioner will usually find it necessary to impress upon the custodians of his patients the vast importance of strict veracity, careful fulfilment of any promise, conscientious watchfulness, unwearied patience, absolute control of temper, unflinching firmness, and steadfast kindness. Once deceived the patient will be long suspicious, a broken promise will rankle in his disturbed mind, a lack of vigilance may result in loss of life, irritability with his whims will sacrifice moral control, want of decision will give the mastery to the patient, and any deficiency in kindness will be bitterly remembered. The patient must never be threatened, made fun of, or contradicted. The application of force will cause obstinate resistance.

The benefits of labour and of education in the treatment of insanity are so widely known and practised that it is unnecessary to dwell on them here.

Patients with hereditary predisposition, "demoniacal possession," with puerperal mania, who imagine their food is poisoned, that they are to be killed, and all those who express themselves, or are known, to be suicidal, must be guarded in such a manner that they cannot injure themselves.

This leads me to say a few words concerning nursing and attendance. It is a difficult matter to obtain proper care and control for poor patients, who should be sent to an asylum directly their insanity can be certified. I am convinced this is the best step that can be taken,

for the benefit of all, the patient, the friends, the doctor, and the public. On no account, where it can be prevented, should a recent case of insanity be detained in a poorhouse. Those whose friends can afford the expense can obtain one or more experienced nurses or attendants on application to a private asylum superintendent: by doing this they have the satisfaction of knowing the patient will be kindly and judiciously attended, and that they and their household will be relieved of a considerable amount of anxiety and trouble and of some responsibility.

As change from hot and dry to cold and wet weather is frequently found to be concurrent with an increased number of suicides, melancholic patients, predisposed to abdominal disorders, should at all times be well protected by non-conducting clothing.

(*To be Continued.*)

On Filaria Sanguinis Hominis Ægyptiaca. —In a communication to the London *Lancet*, August 26th, Sir J. Fayrer, M.D., states that, when in Cairo, last March, on his return from India, he had demonstrated to him, by Drs. Sonsino and Sachs, the existence of a new parasite, "a nematoid hæmatozoon," a "filaria," discovered by Dr. Sonsino in the blood of a young Egyptian Jew, aged about 15, who had, for some years, been under his observation for hæmaturia depending on bilharzia, and cachexia due to that and the presence of intestinal worms—ascaris lumbricoides and oxyuris. "The worm seemed closely to resemble that recently discovered by Dr. Lewis, of Calcutta, in the blood of persons suffering from Chyluria, lymph Scrotum, Elephantiasis Arabum, and which, very probably, plays an important, if not a chief, part in the production of these diseases and pathological changes," but is wanting the external envelope. Dr. Sonsino proposes to call it Filaria Sanguinis Hominis Ægyptiaca. "It is further interesting to know that Dr. Sonsino has recently discovered a new form of bilharzia in the portal vein of a young bull, aged 3 years, killed in the shambles at Zig-a-zag." He terms the parasite bilharzia bovis, and thinks the discovery may be useful from a medico-hygienic and prophylactic point of view.

TREATMENT OF ACUTE ALBUMINURIA.

BY F. DE HAVILLAND HALL, M.D.

Directly any albumen was detected in the urine, the patient was ordered the perchloride of iron, and was allowed no solid food except a little bread and milk, and as much water as he liked to drink; this treatment, together with keeping the skin gently acting, sufficed in the majority of cases, but in a certain number the urine was almost suppressed, and in some there were uræmic symptoms. Whenever either of these contingencies occurred I forbade all food for twelve hours, the child to have nothing but water and a drink made of acid tartrate of potash (ʒi. ad. Oj.) in sweetened water with a little lemon-juice. If at the end of this time the kidneys were beginning to act I allowed a little milk, but not more than a pint in the twenty-four hours; if, however, the uræmia continued with little or no urinary secretion, I persevered with the water and bitartrate of potash, and in severe cases nothing else has been given for thirty-six hours. Dry cupping, mustard poultices over the loins, and a purgative were the only additional remedies employed. The explanation of the good effects of abstention from solid food, and especially meat, during the course of acute desquamative nephritis, is that if a patient is entirely deprived of nitrogenous food the work of the kidneys is lessened and the urine is rendered less irritating, and the mild diuretic action of the bitartrate of potash seems to be useful.

Dr. Andrew, in his paper "On the Treatment of Rheumatic Fever by a Non-Nitrogenous Diet," points out a way in which the treatment I advocate may be extended, inasmuch as by the addition to this diet of arrowroot biscuits and thin water arrowroot, the patient will be able to exist for a longer time without injurious depression than he could on water alone; this plan of treatment has also the effect of rendering the urine alkaline and less irritating.

Mr. Churton, in the *British Medical Journal* (March 4, 1876), has reported some cases of puerperal convulsions which were treated by keeping the patient almost entirely on non-nitrogenous articles of diet.

In September, 1875, I had an interesting case under my care in the Westminster Hospital.

The notes are as follow :—

Alfred Trott, aged 9, admitted into Westminster Hospital on September 14th, 1875. His mother stated that three weeks previously he had scarlet fever.

Œdema first appeared four days ago. On 13th September he passed about half-a-pint of urine in twenty-four hours.

September 14th. Slight œdema of face, desquamating all over, has only passed about two tablespoonfuls of water since last night. Ordered milk (half-a-pint) with water.

Potass. Bitart. ʒj.

Aquæ. ʒxx. fiat. Potus.

15th. Pulse 60, very small, feeble, and irregular. Tongue moist, slightly furred. Has not passed any water since admission. Heart and lungs healthy on physical examination. No ascites. Intellect quite clear ; very drowsy. No headache or complaint of any kind.

Pulv. Jalapæ. Co. gr. xxx. statim.

16th. Pulse 68, same character as yesterday. Bowels not acted, but moved after enema of tepid water. No urine passed. Perspiring freely. Sick yesterday afternoon. Is very sleepy. Has had a pint of milk and the drink in the last twenty-four hours. No headache or other discomfort. At 1 p.m. he passed half a-pint of clear urine (Sp. gr. 1,015 acid, $\frac{3}{4}$ alb.), the first water he has passed since he has been in the hospital (fifty hours.)

17th. He passed about a pint of pale straw-coloured urine in the last twenty-four hours. Sp. gr. 1011 acid, $\frac{1}{8}$ alb. Bowels have not acted. Getting hungry. Has had some beef-tea and some bread and butter this morning. Pulse 72, still irregular, better volume.

18th. Fair quantity of urine. Sp. gr. 1,015 acid, the faintest trace of albumen. Pulse 76, still irregular. Appears quite convalescent. Ordered Tr. Ferri. Per. *mx.* ter. die.

20th. Normal quantity of urine. Sp. gr. 1,002 neutral, no albumen. Pulse 92, irregular.

21st. Urine, sp. gr. 1,004 neutral, no albumen. Pulse 116. Slight otorrhœa.

22nd and 24th. Urine, sp. gr. 1,015, faint cloud of albumen.

29th. Urine, sp. gr. 1,002 neutral, not a trace of albumen.

30th. Urine 1,000, nearly colourless. After this date the urine increased in sp. gr., but there was no more albumen detected, and the boy was discharged on October 22nd quite well, he would have gone before had it not been for a troublesome attack of otorrhœa.

The points which are specially noteworthy in this case are :—1st. The long time which elapsed before the boy passed any water after admission, namely, fifty hours, and from his mother's account he had made very little before he came under my care. 2nd. The entire absence of any of the symptoms of uræmia in spite of the suppression of urine, which I attribute in part to the fact that all articles of nourishment, except a little milk and free supply of water, were withheld. 3rd. The rapid way in which the albumen disappeared ; and lastly, the low sp. gr. of the urine which was registered on several days.

I take this as a very fair illustration of the cases I have had under treatment, and as I was able to watch this patient more carefully than I could in dispensary practice, I feel certain that all the particulars recorded are absolutely true. In hospital practice it is comparatively easy to keep the patient on a particular diet, but, of course, when friends are about the sick-room it is impossible to say to what extent one's orders may have been transgressed.

If any one will take the trouble to compare the treatment of acute Bright's disease as laid down in the various text-books on the subject, he will be much puzzled as to what course he had better pursue, for "when doctors disagree who shall decide ?" and it cannot be said in this instance "that in the multitude of counsellors there is safety." The great point of dispute is as to the employment of diuretics. Dr. Johnson, who is the great opponent of this plan of treatment, gives as his reasons that there is "first a morbid condition of the blood, which has excited disease in the kidneys, and that as a secondary consequence of the renal disease the blood has become contaminated by the retention in it of urea and other excrementitious matter," and he therefore advises that the kidneys should have as little work to do as possible,

and that the other excretory organs should be called upon to assist in carrying off the waste products to the utmost of their power.

His treatment consists of—1. Warmth in bed. 2. Diet. "The food should be scanty, consisting of gruel arrowroot, milk, or weak broth." 3. The use of the warm water or the hot air bath, and antimonials to cause diaphoresis. 4. The bowels to be kept freely open. "The circumstances which indicate the necessity of additional remedies are a very scanty secretion of highly albuminous and bloody urine, with, occasionally, severe pain in the back, more or less pain in the head, some degree of drowsiness or delirium, at length, perhaps, convulsions or coma, or an alternation of these two formidable symptoms." For these he recommends cupping on the loins. As regards diuretics, he says: "I mention the subject only for the purpose of deprecating their employment."

Dr. W. Roberts, on the contrary, writes:—"Objections have been made, on theoretical grounds, to the saline diuretics (acetate and citrate of potash) in acute Bright's disease. Experience has proved, however, that they may be employed with great advantage. They become changed in the primæ viæ into alkaline carbonates, and these diminish the acidity of the urine and render it more bland, as it percolates the renal substance.——In a considerable number of cases of acute Bright's disease, coming under treatment early, I have obtained almost invariably the best results by the free adminstration of the citrate of potash." His treatment is as follows:—"An endeavour should also be made to allay the fever and restore the action of the skin, by a citrate of potash draught, given every two hours, in effervescence, or a mixture of the Liq. Ammon. Acet. in two or three drachm doses, with fifteen drops of tincture of henbane in an ounce of Inf. Lini. The diet should be composed of light farinaceous substances with milk, beef-tea, and broths. Flesh meat in any form is objectionable in the early stages."

Dr. Dickinson bases his method on the necessity there is for an abundant flow of fluid through the kidneys to wash out the extravagant growth of epithelial cells and prevent them blocking up the tubes. "Hydragogue purgatives and vapour-baths, while tending comparatively little to remove the elements especially belonging to the urine, divert the water which is wanted for this purpose. Of all diuretics waters is the most valuable. The patient may be restricted to a fluid, but nutritious diet, while pure water is taken freely. In children, when the kidney responds readily to this simple stimulant, the disease will generally recover without further treatment. In grown persons, or in children when the disease is severe, digitalis is a most valuable adjunct." He strongly condemns the employment of hard purging and sweating, and he would reserve the repeated use of hydragogue purgatives for obstinate and hopeless cases only. Dr. West thus criticises Dr. Dickinson's treatment by the administration of a large quantity of water:—"Nothing whatever that was observed during its use among my patients at the Children's Hospital seems to justify one's regarding the drinking of two or three pints of cold water in the twenty-four hours as more than a useful adjunct to the treatment."

From what I have seen of this disease I am inclined to agree with Dr. Dickinson rather than Dr. West, but I cannot too strongly enforce the opinion of the latter as to the inutility of cathartics in the treatment of acute albuminuria, there is the risk of checking perspiration and thus throwing additional work on the kidneys, and sometimes obstinate diarrhœa is set up.

Dr. F. Roberts says:—"The most important object in treatment is to endeavour *to get the skin to act freely and persistently*," but goes on to say that the experience of many practical observers proves that some diuretics may often be given with great benefit.

Dr. Tanner, after quoting Dr. Johnson's remarks, already given, writes:—"Our double object must therefore be to rest the affected glands while we purify the blood by means of the other excretory organs," and recommends diaphoretics and free purging.

Dr. Copland advocates the employment of diuretics only after the more active symptoms have passed, and says:—"Of diuretics the nitrate, tartrate, or super-tartrate of potash,

conjoined with nitre and the spiritus ætheris nitrici, are amongst the best," and he quotes M. Rayer's statement that "he has found a milk diet, continued for some days after the subsidence of the acute symptoms, of great service."

The authorities to whom reference has been made are sufficient, I think, to show the difference of opinion in reference to the use of diuretics in the treatment of acute Bright's disease, for while all are agreed that the more powerful and irritating drugs of this class should not be employed, some advise the use of the milder diuretics, whereas others say most emphatically "Diuretics are not to be given." The diuretics which are usually recommended as the least irritating are the sweet spirits of nitre, cream of tartar, and infusion of digitalis; if the stomach rejects the digitalis, an infusion four times the strength of the pharmacopœial one may be applied to the abdomen as a fomentation.

Dr. Southey attributes the success of the employment of the tartrate of potash in Bright's disease to the "abundant diuresis of alkaline urine;" and goes on to say, "I am speculative enough myself to imagine that an alkaline fluid, passing through the urine tubes, has some similar action to that of weak soda or potash solutions upon sections of dead kidney-tissue under the microscope. I mean, that fat granules are saponified, cells rendered more translucent, the interstitial tissues become more loose, and the circulation is thus facilitated." It was some such idea as this which first induced me to try the plan of treatment I advocate, and the success attending it has induced me to call the attention of the profession to it, in the hope that a more rational plan of procedure may be adopted than the hard purging and sweating which is still too much in vogue. As a general rule, far too little attention is paid by the medical attendant to the diet of the patient, that is to say, the directions given are vague in the extreme, but in acute albuminuria, as in typhoid fever, any indiscretion in the food may be visited with the most severe punishment,—an attack of convulsions may be caused by excess in the first, just as I have seen perforation result from taking solid food too early in typhoid fever. I would sum up the treamtent of acute Bright's disease in the following words:—

1. Milk and water with arrowroot, no solid food. 2. Mild diuretics, such as the citrate or bitartrate of potash with a free supply of water. 3. The skin kept just moist. 4. A daily evacuation of the bowels.

Mode of Production of Symptoms of Diseases of the Brain.—I will give here the following propositions, each of which simply constitutes a summary of facts. 1st. A lesion in one-half of the brain may produce symptoms either on the opposite or on the corresponding side. 2nd. A very small lesion, whatever be its seat, can produce most extensive and violent symptoms. 3rd. A lesion occupying the same extent on the two sides of the middle line of the brain may produce symptoms only or chiefly on one side of the body. 4th. Symptoms may appear suddenly from a slowly and gradually-developing lesion. 5th. Symptoms may appear slowly from a suddenly-produced lesion. 6th. The greatest variety of symptoms may proceed from a lesion in the same part of the brain. 7th. The most various parts of the brain can give rise to the same symptoms. 8th. Permanent lesions may produce symptoms by attacks, just as they produce epileptiform seizures. 9th. Symptoms may cease suddenly or rapidly notwithstanding the persistence of the lesion. 10th. Symptoms of brain disease may appear from an irritation of visceral and other peripheric nerves. 11th. Considerable lesions anywhere may exist without the appearance of symptoms. To sum up all these propositions, I will say that there is no necessary relation between the seat, the extent, the kind of a lesion, and the symptoms that may appear from its influence. According to the criterion above mentioned, symptoms being so inconstant and so variable from the same lesion in the same part (whatever it be) of the brain, must be considered as effects of irritation, and not as effects of loss of function. Besides, their variety, even when they proceed from a lesion in the same place, is too great for our considering that those which are clearly due to an irritation, such as convulsions, vomiting, &c., are mere manifestations of the special properties or powers of the part where there is a lesion.—*Extract from Dr. Brown-Sequard's Lectures.*

WARM WATER INJECTIONS IN THE TREATMENT OF UTERINE HÆMORRHAGE.

Extracts from a lecture delivered before the Berliner Gesellschaft fur Heilkunde, by Dr. Windelbrand, and published in the Deutsche Medicinische Wochenschrift, No. 24, 1876.

If I claim your attention to-day in the discussion of a plan of treatment which seems in direct contradiction to the generally accepted views of the correct course to be adopted by physicians, it will be to direct you to a careful consideration of a course heretofore almost unknown, but which will, in my humble opinion, produce a revolution in the treatment of uterine hæmorrhages and the pathological processes producing them. My object will be to induce others to adopt my plan, and thus bring into general use an important and valuable means of treatment.

In the first place, I wish it distinctly understood that I do not claim any merit of originality, but that this belongs to Dr. Mann of Rhode Island, who made exclusive use of hot water injections in two cases of hæmorrhage following abortions, and succeeded in both cases in checking it. He claims that these injections not only effectually checked the bleeding but greatly diminished the severity of the pains. I will not enter into any further particulars, but will merely state that the idea struck me as so novel, and at the same time reasonable, that I resolved to resort to it at the first opportunity. This soon offered itself in the case of an abortion to which I was summoned after another physician had in vain applied the tampon, ice injections and compresses, ergot and acids internally, &c. The ovum could be barely reached through the open os; the lower segment of the uterus was very much relaxed and did not show the slightest disposition to contract; the patient was in a state bordering on collapse, and the most decided measures seemed necessary to be taken. I decided, before trying the tampon a second time to employ the warm injections, which I did by means of an ordinary syringe with an uterine nozzle, the temperature of the water being 38°–39° R. (about 117°F.) Almost at the moment the stream of hot water entered the vagina the cervix began to contract; after 8 or 10 of these injections at intervals of 5–10 minutes, the ovum and its adnexa were forced into the vagina and were readily removed. The case then progressed without further trouble. Since this positive demonstration of the effect of heat on the contractibility of the uterus I have employed it in all subsequent cases of abortions, and indeed, in all hæmorrhages dependant upon relaxations of the uterus during delivery, whether premature or at term; also in case of inefficient pains and always with excellent results, as I have never yet seen the slightest ill effects follow their use. Very shortly after the first case in which I resorted to the warm injections I was summoned to a woman faint from repeated hæmorrhages, with frequent pulse and cold extremities, and on examination found the os slightly dilated, through which could be felt the border of a placenta laterally attached, and the shoulder of the fœtus. Even this examination caused profuse bleeding. I attempted to introduce my hand, dilate the os and turn, but was prevented by the rigidity of the neck. Besides, there were scarcely any pains. I now made several injections and had the satisfaction of seeing the uterus take on energetic contractions; after several of these a large amount of amniotic fluid was expelled and the head of the fœtus presented. The bleeding had ceased, and within a short time the head was delivered in the normal position.

I have likewise stopped the hæmorrhage in two other cases of placenta prævia at seven months, and with recurrence to the same plan when necessary have conducted the women safely to full term. * * * * * I have seen the same result of the hot injections on the contractile fibres of the uterus even in cases in which a large portion of the organ was occupied by neoplastic growths, such as carcinomata, and a considerable part of the fibres are rendered useless. Even in such instances they often checked dangerous hæmorrhages. * * * * * *

It is my custom to make the injections with the simple irrigator with my patient occupying the dorsal decubitus. In this way I get a continuous stream. I begin with a temperature of 38° and gradually increase it according to the severity of the case up to 41° R. This can be

very readily done as the sensitiveness of the sexual organs is very quickly lessened by heat.

* * * * * *

I do not attribute this action to any coagulating effect of the water or heat upon the blood, but to the irritability of the uterus, excited by the hot injections.

ANTAPHRODISIAC PROPERTIES OF TOBACCO.

BY MARTIN-DAMOURETTE.

(Jour. de Med. et de Chir., May, 1876.)

The anaphrodisiac properties of tobacco have long been known, as Foussard has well shown in his work, and have induced its use in the numerous convents of Italy. When the cause of impotence is obscure, it is well for physicians to remember this noxious property of tobacco, as the following cases observed by the author show :

A young man who smoked more than twenty cigars per day, complained of loss of digestive power, weakness, feeble memory, and impotence. As he was about to marry, he consulted a physician. The latter, aware of the habits of his patient, ordered him to discontinue the use of tobacco, which was followed by restoration of the genital function.

A young physician had complete genital frigidity, for which he had taken strychnia till he consumed thirty-six centigrammes daily, without either injurious or remedial results. The author found upon investigation that he smoked cigarettes only, but used them constantly throughout the day. His muscular vigour and power of resisting fatigue were thus sensibly diminished ; and the author concluded that the incredible tolerance of strychnia was due to profound paresis of the motor nerves, occasioned by the excessive and gradually increasing use of tobacco. By abandoning its use, this patient was perfectly relieved, without resorting to medicine or hygiene.

A young and robust student of the polytechnic school became inspector at a tobacco manufactory. He soon experienced considerable loss of genesic power and finally became impotent. Both the patient and physician agreed as to the probable cause of the disease, and after vainly making trial of other remedies, the inspector of tobacco engaged in another business, when he speedily recovered his generative power.

IDIOPATHIC PYROSIS.

A Lecture delivered in Hopital de la Pitie, by Professor Lasegue.—From the Allgemeine Wiener Medizinische Zeitung, July 18, 1876.

Pyrosis is a trivial affection of the stomach which generally lasts but a short time and rarely necessitates hospital treatment. Nevertheless, as it is quite frequently met with in ordinary practice it should receive our careful attention and study.

As a text for my remarks I present to you, to-day, a labourer 38 years of age, otherwise in excellent health, who for about ten years has had very painful attacks of a peculiar gastric neuralgia, which last on an average 10-12 days and recur three or four times a year. The pain does not radiate toward the spine as in simple ulcer of the stomach ; it is not a cutting or piercing, but a burning pain, a feeling of internal heat, and at times of an unbearable fire within. When it spreads at all it is upward, following the course of the œsophagus.

The pain is often accompanied by sour vomiting, and sometimes, when the attack is particularly severe, the patient vomits ropy mucus similar to that of drunkards, but never vomits blood or food. Another resemblance between this vomiting and that of the inebriate is that it always occurs in the morning before the introduction into the stomach of food, and not immediately after eating or an hour or two after, as in round gastric ulcer or in carcinoma of the stomach.

This man never indulged to excess in spirituous liquors, but inclined to the opposite extreme. Of late the disease has made him almost a hypochondriac. He is afraid of everything which he thinks might produce an attack or increase the severity of his disease, and, knowing that the abuse of alcoholic stimulants often injures the health, he is quite rigourous with himself in this regard. Therefore drunkenness cannot be the cause, although his case seems to have a good deal in common with alcoholic gastritis.

The man's tongue is coated, his appetite is diminished and he is somewhat inclined to constipation,—symptoms quite common among tipplers ; he has never, however, presented any

symptoms referable to the brain or sensory nerves. During the attacks he sleeps but little, but his sleep is not disturbed by frightful dreams, nor has he any of the hallucinations common to drinkers.

This idiopathic pyrosis disappears regularly within a few days. Can we attribute this to a rational mode of treatment?

In similar cases we usually begin with the administration of mild laxatives, magnesia, for example, continue it for four or five days, then substitute the alkaline carbonates. Finally we order tonics to arouse the lost appetite.

This medication is, perhaps, rational, but is it effective and useful? This we think we have good reason to doubt.

Although the magnesia and the alkalies would probably tend to neutralize the increased acidity of the gastric fluids, and although under their administration we see recovery follow in numerous cases, it is none the less true, that very often this is not the case and that the pyrosis continues for weeks and months during the administration of these remedies. We are, therefore, justified in asking the question to what extent the duration of the neuralgia can be cut short in this or that individual by the exhibition of the above mentioned agents.

Finally, it must be remembered, that when a pyrosis passes off with or without rational treatment, we do not cure the affection but simply hasten the crisis.

A symptomatic pyrosis, distinct from the affection of this individual, is often observed in men who produce an irritability of the stomach by the continued use of certain articles of diet or certain medicaments. Some of the "imitation" wines, made by the addition of acids, produce a pyrosis, by which several persons of one family are frequently attacked. On changing the wine, the neuralgia passes off in a few days and does not return so long as the wine taken by the patients is good. Every one is aware that the salts of quinine very frequently produce neuralgia of the stomach, as do also various chalybeate preparations and a few other medicines. Such pyrosis is not, however, idiopathic as in the case I have presented to you to-day.

BATHING IN ENTERO-COLITIS.

Dr. C. G. Comegys, of Cincinnati, in the New York Medical Record, says: "Before we are called to these cases tentative measures for the relief of the diarrhœa have already been applied by the friends, so that the inflammatory stage is generally fully developed when we first see the patient. The skin is hot (temperature 102½° to 105°), the pulse rapid (130 to 150), respiration 30 to 50, with frequent purging of semi-fluid, greenish watery, fæcal, and half digested matters; the mouth and tongue are dry; the thirst intense, but the water taken to slack it is quickly thrown off; the eyes are staring; pupils contracted; insomnia and rolling of the head, with utterance of distressing cries, due to headache from hyperæmia of cerebral vessels and unappeased thirst. Such is a general statement of the symptoms.

"I at once proceed to give the little sufferer a bath in hydrant water, which with us in summer is about 75°. I have found it necessary to give this my personal attention at first; the mother or friends will not carry out instructions, on account of the cries and resistance of the child; it seems to them a great cruelty. The contact of the hot skin with cold water is certainly painful for the moment, hence I immerse the body from legs upward gradually, sponging the skin in advance, so as to obtain tolerance.

"When the body and extremities are fully under, holding the head in the palm of my left hand, I pour over its surface cooler water, such as cistern water, which is here about 65°. This is kept up for ten or even fifteen minutes. Meanwhile the child ceases to cry or struggle, and is evidently greatly comforted; more especially when cool water is freely given to drink—the greedy swallowing of which shows how much of its distress is due to thirst.

"After the bath the patient should be wrapped, unwiped, in a light woollen shawl, and laid upon its bed, with a slight additional covering. The pulse has lost frequency, but is quite feeble; the breathing is slower and the skin quite cool, even bluish in hue. The sedation may seem at first too great; but reaction soon begins, a healthy warmth and perspiration are established, and the child falls into a

peaceful sleep. The scene has so changed that one will find no difficulty thenceforth in getting a bath given three or four times in twenty-four hours, if the alarming train of symptoms make show of revival; and they will revive to such an extent as to require exhibitions of the bath from time to time for two or three days perhaps, for the diseased state of the mucous membrane within has not been as suddenly relieved as the abnormal heat of the body.

"In the meantime internal remedies should be freely employed. Quinine, whisky, beef-tea, milk, and lime water are the chief agents. One grain of quinine and a drachm of whisky every three hours, for a child eight to sixteen months old, looks rather formidable, but they will be found admirable while the disposition to fever lasts.

"Subsequently bismuth and pepsin are of great value to restrain diarrhœa and to assist digestion, so greatly at fault, owing to the blow which the mucous membrane has suffered."

The Progress of Cadaveric Decay.—Physicians are not unfrequently called upon to give an opinion, in the case of the discovery of corpses, of the period that has elapsed since death. The following are the rules of Dr. Caspar, given in his *Medical Jurisprudence*. The temperature is assumed to be moderate, and the body exposed to the air.

(1.) The greenish discolouration of the abdomen and the softening of the eyeballs indicate that the person has been dead from twenty-four to seventy-two hours.

(2.) After three to five days, the green discolouration has become deeper, and extended over the whole of the abdomen, including the genitals; while similar patches have begun to appear on other parts, especially the back, lower extremities, the neck, and sides of the chest.

(3.) In about eight or ten days, the greenish patches have coalesced, and changed to a reddish-green; gaseous products have become developed in the abdomen; the cornea has become concave; the sphincter ani has relaxed; and the ramifications of the subcutaneous veins can be traced on the neck, breast, and limbs.

(4.) After fourteen or twenty days, blisters have appeared on the skin, and the development of gases has become general, distending the whole body.

(5.) Lastly, after this period it is impossible to determine the date of the decease.

THE MANAGEMENT OF DIPHTHERITIC PARALYSIS.

The eminent Sir John Rose Cormack says on this subject, in the Edinburgh *Medical Journal*:—

Iron is particularly indicated in diphtheritic paralysis, as the patients are always anæmic. There are few cases in which its administration does not prove itself in an obvious manner to be useful in a high degree. Sometimes it is only borne in very small doses.

Nux vomica, either in the form of extract or the liquor strychniæ of the British Pharmacopœia, taken daily, with some ordinary combination of laxatives, such as the compound rhubarb pill of the British Pharmacopœia, ought to constitute a part of the treatment in nearly every case. It increases the peristaltic action of the intestine, imparts expulsive and retentive power to the bladder, and likewise has a general influence in improving innervation. The dose ought to be moderate, for large doses prove too exciting to the nervous system, and so tend to exhaust rather than invigorate its flagging powers. From half a grain to two grains of the extract once a day, with or without the occasional or constant addition of from five to ten drops of the liquor strychniæ two or three times a day, are suitable doses.

Local treatment is of the most importance with a view to direct toward the wasted and wasting muscles a greater supply of blood, and thereby improve their nutrition. Occasional blisters act very beneficially in this way; but they must not be relied on to the exclusion of the constant use of stimulating pastes or liniments. I do not know of any local stimulant more efficacious, or better adapted for continuous use, than a ginger and mustard paste. The object of using the paste is to maintain a warm glow in the skin without vesicating it. The potency of the paste must therefore be proportioned to the susceptibility of the skin. By applying too powerful a stimulant to an extensive cutaneous surface, we may be obliged to suspend the local treatment, and so impede the progress of the cure. In some excitable patients who cannot bear long-continued counter irritation of the skin, a gentle kneading of the paralyzed muscles three or four times in

the twenty-four hours will be found useful as a means of directing a supply of blood to them. In such cases, after each kneading, a moderately stimulating liniment containing a small quantity of laudanum may be applied with great benefit. The laudanum prevents an uneasy bruised feeling, which is often complained of after the kneading, and in irritable subjects is apt to induce restlessness and insomnia.

Galvanic excitement of contraction in the paralyzed muscles is often decidedly useful; but it is a measure which requires to be employed with moderation and at intervals of about twenty-four hours. If resorted to too early, or too freely, it exhausts the nervous power of the affected muscles.—*Phil. Med. and Surg. Reporter.*

VOMITING—ITS PHYSIOLOGY.

Dr. T. Lauder Brunton *(Practitioner)* gives the following summary of our knowledge on the subject:

(1) Vomiting consists of two factors—the opening of the cardiac orifice by the contraction of the longitudinal fibres of the œsophagus and the simultaneous compression of the stomach by the abdominal muscles and diaphragm.

(2) When innervation is disturbed, these two factors do not occur together, and thus retching may occur without vomiting.

(3) The movements of vomiting are correlated by a nervous centre in the medulla oblongata, from which impulses are sent down through various motor nerves to the muscular structures engaged in the act.

(4) This nervous centre is probably closely connected with the respiratory centre, but is not identical with it.

(5) It is usually set in action reflexly by irritation of the pharyngeal, gastric, hepatic, enteric, renal, uterine, ovarian, and possibly, also, by the pulmonary and vesical nerves, which come from the periphery towards it. It may also be excited by impressions sent down to it from the brain.

(6) Vomiting may be arrested in two ways: either by removing the irritant which is exciting the vomiting centre, or by lessening the excitability itself, so that the centre no longer responds to the impressions made on it from without.

TREATMENT OF DISEASE OF THE STOMACH BY WASHING OUT BY MEANS OF THE STOMACH-PUMP.

A novelty in practice, which was suggested by Kussmaul, consists in washing out the cavity of the stomach by means of appropriate remedies.

The patient upon whom it was practised was a woman who gave a history of nausea and vomiting. The diagnosis rested between malignant disease and chronic gastric catarrh; but in either case the same treatment was indicated.

The effect of the stomach-pump was to make the patient feel easier, so much so, indeed, that it was frequently had recourse to at her request. After a few days the vomiting, which had been nearly constant, became exceptional, and after a short time the patient left the hospital very much improved.

In using the stomach-pump the method employed was, first to evacuate the stomach, and then inject a weak solution of salicylic acid, which was subsequently pumped out.

THE *Chicago Medical Journal and Examiner* for June contains a report by an army surgeon of transfusion of defibrinated human blood in a case of tubercular phthisis. The patient was reduced to the last stage of emaciation and exhaustion, and was not expected to live forty-eight hours. Nearly four ounces of blood were injected, when, the patient complaining of a sense of fulness in the head, the operation was stopped. Just before the operation his temperature was a little over 102° F., pulse 105, and respiration 34, and he was in great distress. Very soon after the operation his respiration fell to 27, with a lowered temperature and pulse, and he breathed comfortably. The night-sweats, which had been very severe, ceased on the third night after the transfusion, and the hæmoptysis, which had been frequent, disappeared. "He began at once to gain appetite, strength, and flesh. In less than a month he gained seventeen pounds in weight, and is increasing in weight at the rate of three-quarters of a pound daily. The dyspnœa is now insignificant and the destruction of lung tissue seems to have been arrested."

Surgery.

THE FASCIA LATA: ITS USE IN STANDING AT REST; ITS VALUE IN THE DIAGNOSIS OF FRACTURE OF THE NECK OF THE FEMUR.

BY OSCAR H. ALLIS, M.D.,
Surgeon to the Presbyterian Hospital.

The problem of standing and at the same placing the muscles of the lower or hinder extremities at rest, is one beautifully wrought out in the higher order of animals. Those whose bodies are near the ground, and upon which the necessity of lying down and rising again entails no inconvenience, have no need of such a rest. But the larger and more useful animals would suffer great inconvenience and great fatigue if they had no other way of resting than by lying down. Take the horse for instance. Farriers relate of some of them that they have never been known to lie down; that neither the bedding nor the body of the animal has shown at any time evidence of his lying, night or day. And, what is quite as remarkable, they say that horses accustomed to lie down will never do so when they are sick; and that when a sick horse lies down it is very likely never to rise again.

The remarkable feature of this will be somewhat cleared up if we will but note the attitude of the horse when *resting*. The fore part of the body lies as in a swing supported by large strong muscles, and when the horse is resting these relax until their fasciæ and sheaths become supporting tendons. A horse is *not so tall* when he is asleep or resting as when awake and active. This may be verified by taking the measurement at the shoulders when he is quiet and at rest, and a second measurement after *waking him up with a blow from the whip*.

But it is to the hind legs of the horse that I would call attention, as there is a strong analogy between the manner of standing at rest in the lower animals and in man. If you notice the horse you will see that he throws the weight of the hinder part of his body on one leg, while he seems to balance himself by resting the other limb on the tip of the hoof. In a few moments he changes his position, throwing the weight upon the other limb. Thus the entire body is rested almost as perfectly and completely as in lying down. Such an arrangement for resting while in the erect posture is possessed by man, though not to the same degree. I have merely directed attention to the most familiar illustration, that in the case of man it might be the better understood.

When we wish to rest ourselves in the erect posture, we first balance the lower extremity upon the foot. This done, we lock the knee-joint *after the fashion of a carriage-top hinge*. With the limb balanced on the foot and the knee locked, we cast the body a little to one side, when we experience a sudden arrest of the body. One thing more, and the act is complete. The unoccupied limb is cast a little in front away from its fellow, as if to poise or balance the body, and we are at rest *absolutely* so far as the muscles of locomotion are concerned. We remain in this position until a sense of weariness comes over us, when we change the limbs and reverse the attitude. Sometimes we vary this by leaning the body against some firm object, but in all these positions the muscles of locomotion are unemployed. In this *resting* posture a portion of the fascia lata takes the place of the muscles in sustaining the body, giving the latter the rest we instinctively avail ourselves of.

This fascia lata forms a sheath for all the muscles of the thigh, binding them up in groups, and bringing them into immediate harmony with one another and the femur. Its thinnest portion is at the inner aspect of the thigh where it forms the deep fascia of the adductors. It is much stronger in the sheaths formed for the special muscles of the locomotion,—*i.e.*, the flexors and extensors. To enable these muscles to act at greatest advantage, this fascia can be made tense by two strong muscles, the tensor vaginæ femoris and gluteus maximus, so that whenever we stand erect, walk, or run, these two muscles are chiefly concerned in regulating the tension of the femoral aponeurosis. One can easily verify the accuracy of this if while walking or standing he will place his hand upon the outer side of the knee, just above the articulation. Here he will find a strong firm

tendon, attached to the outer tuberosity of the tibia, that will harden with each step, and become especially prominent.

This tendon-like structure, which is so prominent in the erect but which almost disappears in the sitting posture, is a portion of the fascia lata. If one will carefully trace upward this tendon, he will find that it extends to the crest of the illium, and in its course passes over the great trochanter. This portion of the fascia lata is the strongest, firmest, and thickest of any part of it, and there is a special reason for its great strength. When a person is obliged to stand for any length of time, he finds himself resting on one limb. This resting is in no respect a muscular act, but is accomplished by *pressing the trochanter against this thickest part of the fascia lata.* If the reader is in the least sceptical upon this point, let him stand up and, resting himself upon one limb, feel the tendon on the outer side of the knee. Let him change to the other limb and see how prominent the corresponding structure becomes. Let him do this quickly, throwing his weight alternately upon one and the other limb, and *notice the suddenness* with which he is arrested. *If this were muscular, the rest would not be so complete. If muscular, the stoppage would not be so sudden. If muscular, I could not verify the experiment upon the cadaver,* as I have often done. All that is necessary is to secure the knee in splints, and the resting attitude can be perfectly counterfeited in the cadaver.

It will thus be seen that when standing *erect*, walking, or running, the act is purely *muscular*, but that man, like the lower animals, has a means of resting himself while in the upright position.

This curious and beneficent provision can be turned to good account in fracture of the neck of the thigh. Let the patient stand before you resting his hands upon a table or chair. Notice that his *limbs are parallel, and that both feet rest symmetrically upon the floor.* Now, if there is a fracture of the neck, the fascia lata will be tense upon the side of the sound limb, but the *tensor muscles* have no firm *point of resistance* in the fractured one, and cannot make this femoral fascia tense, as in the other limb. Owing to this the examiner will find that the fascia will offer no resistance to an examination of the head of the great trochanter, as it does in the sound state, but is lax, and can be easily indented. He will also notice that the tendon on the outer side of the knee will possess no corresponding prominence with that of the sound limb.

It is necessary that the patient stand while this observation is being tested, for in the erect posture the fascia lata lends its support to the other muscles. In the reclining posture all the muscles are at rest, and hence this feature disappears.

This matter has been under observation for two years, and I am satisfied from repeated verifications that it possesses diagnostic value.

In dislocations the limbs can *never* assume parallelism. The injured limb must *always* stand off from its fellow. Hence I have been particular to state that the observer should note that the limbs are parallel, and that both feet rest symmetrically upon the floor.

One other point of some value. Let the patient lie on his belly. Tell him to press the pelvis into the bed,—*i.e.*, to hug the bed. In doing this the great gluteus of the sound limb will make a great dimple, but, owing to the shortening of the limb and the want of resistance on the part of the femur, this dimple will be absent on the fractured side.

On Torsion of Arteries.—M. Tillaux, at the conclusion of a paper on this subject, arrives at the following results :—1. Torsion is applicable to arteries of all sizes, but is most applicable to large ones. 2. A single pair of forceps is all that is required to effect the torsion. 3. The artery ought to be seized obliquely, so that the whole width of the vessel is completely in the grip of the instrument. 4. The artery twisted till the end seized separates away altogether. 5. It is useless to roll back the internal tunics on the proximal side, or to limit beforehand the point at which the torsion should terminate. 6. Torsion can be effectively applied to atheromatous arteries and to inflamed arteries. 7. The torsion of arteries favours the immediate reunion of wounds. 8. The torsion is as effective as the ligature in preventing primary hæmorrhage, and much better than the ligature in preventing secondary hæmorrhage. (*Bulletins de la Société de Chirurgie de Paris*, t. ii., No. 3, 1876.)

CASE OF TRAUMATIC TETANUS—RECOVERY.

BY A. W. SHELLEY, M. D., HARRISBURG, PA.

Was asked by Dr. Van Cleef to see a patient in the country for him, as he was at the time engaged.

The patient, a woman, aged thirty-nine, previous health very good, and masculine in ap pearance and manner.

On June 4, 187 ', in the effort to rescue her drowning child from a deep hole in the creek, a stub of wood, an inch in length and of the thickness of a crow quill, penetrated deeply the plantar surface of the great toe, at the metatarso-phalangeal articulation. She would not consent to her friends' solicitations to have it removed.

18th.—She complained of a stiffness in moving her jaw, and experienced a difficulty in walking. A quack doctor told her she had rheumatism, and treated her accordingly.

22nd.—She fell, and with some assistance regained her feet, but it was only with an effort that she continued her household duties.

26th.—Stub came out by suppuration.

27th.—In an attempt to walk across the floor she fell, having a general tetanic spasm, which occasionally partially relaxed, but only again to recur with renewed violence. She was now confined to her bed. Becoming alarmed, as well as dissatisfied with her attendant, a regular physician was summoned.

Patient was first seen July 1, 1876. The wound was dry and inflamed. Probed it, but could detect nothing foreign. The muscles affected were those of the lower extremities, back, abdomen, and jaw. The pharyngeal, respiratory, and diaphragmatic muscles were only partially involved. The sphincters retained their contractility. The abdomen was very hard and muscles rigid, and the rigidity of the lower extremities was more marked than of the upper. The paroxysms recurred without apparent provocation, and almost amounted to opisthotonus. The intellect was clear, and the patient entirely rational. Could converse freely, except for the dyspnœa, due evidently to spasms of the respiratory muscles and diaphragm.

Patient suffered greatly from gastric derangement. Tongue was covered with brown fur, pulse full, and 90 or more per minute, urine high coloured, with a characteristic brick-dust deposit on standing, bowels constipated, pain in back, and a general languor. Administered in two powders, three hours apart, twelve grains of calomel and half a grain of ipecac., to be followed in three hours with a full dose of sulph. magnes. Left a solution of tr. aconit., and fl. ext. veratrum viride, to be given every third hour.

July 2nd.—Dr. Van Cleef and I saw her together. Rigidity not so constant, except when patient was moved, pulse softer and not so frequent, bowels freely evacuated, pain in back less, tongue moist and cleaning. Used the tobacco-injection treatment with decided effect. After noting the result we gave directions for it to be used only during a paroxysm, or when one threatened. We gave full doses of morphia until rest was secured.

3rd.—Patient more relaxed, but weaker, and treatment continued.

4th.—Patient weaker, but abdomen and muscles still less rigid. Owing to weakness, it became necessary to stop the tobacco or depressing treatment. We now gave her table-spoonful doses of spiritus frumenti and one and a-half grain of quinine every four hours, and morphia in the evening to secure rest.

5th.—Pulse frequent, but stronger; otherwise the condition much the same. To the treatment of the previous day we added hydrate chloral and bromide of potassium, in full doses, until patient slept or rigidity ceased. We gave the medicines alternately, each every fourth hour. The morphia was now omitted.

6th.—Patient had a refreshing sleep during the night; pulse slower and soft; appetite good for the first time; rigidity confined to the lower extremities and jaw, with spasm of the muscles of the back on movement. Abdomen soft, with occasional hardening on pressure.

7th.—All the symptoms improving, and medicines continued.

8th.—Continues to improve; rigidity of lower extremities and jaw gradually yielding. Hydrate of chloral to be given only in the evening sufficiently to quiet the system. Other medicines given three or four times a day.

9th.—Improvement very decided; felt well enough to sit up. Sat on a chair after dinner. The abdomen remained quite soft on being kneaded. The spasms amounted only to an occasional yawning stretch.

10th.—Could turn on to her side herself, and was gaining strength, and again sat on a chair. During the entire sickness the intellect was clear.

16th.—Patient sitting on a chair. Can walk well with a little assistance. Recovery complete. To us the interesting feature of the case consists in the length of time (three weeks) the stub remained before any evil resulted, and its full development only after the source of irritation was removed, and the very marked improvement after the administration of the hydrate of chloral.

TWO RARE DISLOCATIONS.

The *New York Medical Record* (quoting the *Mouvement Medical*, June 10) says: Dr. Gallez recently reported to the "Acad. Royale de Medecine de Belgique" two cases of very rare dislocations. First: Luxation of symphysis pubis, in a man 35 years of age, produced by a slipping of the foot while in the act of throwing a heavy mass. * * * * The left pubis was displaced downwards, outwards, and forwards, and formed a tumour under the integuments. * * * * The pubis moved when the thigh was flexed and adducted. The bladder was not affected. The patient proved refractory, and would not submit to treatment.

Second: A labourer, 53 years of age, fell on the edge of a cylinder, on his epigastric region. Examination revealed a tumour, as large as an almond, over the lower end of the sternum, which, when pressed upon from above, moved downward into the position of the Xiphoid appendix; the pain, on movement, was severe, and a bruit was produced similar to the dry click of the lid of the small box used for wax-lights. Dr. Gallez was able to reproduce and reduce the luxation at will, and finally retained the appendix in position by means of a compress and adhesive plaster. * * * * There are only two other cases of luxation of the Xiphoid appendix on record. They were both reported by Malgaigne, and in both the luxation was inwards, and was accompanied by vomiting. In Dr. Gallez's case, the posterior chondro-xiphoid ligament was ruptured, and the anterior ligament carried the cartilage forwards. This is probably a unique case of *pre-sternal dislocation of the Xiphoid appendix.*

SUBCUTANEOUS OSTEOTOMY.

From the *Medical Times and Gazette*, July 22, 1876.

On Saturday last, July 15, we were attracted to the London Hospital by a notice that Mr. Maunder would perform subcutaneous section of the femur with the chisel and mallet, to correct an angular deformity resulting from anchylosis after hip-joint disease. Like many of our readers, we had made ourselves acquainted with what had passed at a recent meeting of the Clinical Society (May 12, 1876), when Mr. Maunder read a paper on this subject, and exhibited patients who had been operated upon in this way; but we wished to see the operation done, and the instruments employed for the purpose. These we will now describe as we witnessed them, for the information of those surgeons who are interested in the subject. Two patients were submitted to this treatment on Saturday—one was a young girl who for about seven years had been unable to put her foot to the ground. Disease of the hip-joint had ended in fibrous anchylosis, with the thigh fixed at an angle of 118° with the trunk. Thomas' splints had been tried for several weeks with the view of gradually straightening the limb, but no improvement whatever had resulted. The other patient was a young man of fine proportions and well nourished, who had been sent up from Plymouth with the express object of undergoing the operation. Disease of the left hip-joint had supervened upon fever, and had ended in fibrous anchylosis with the leg at right angles with the trunk. Before commencing the operation, an assistant standing in front of the patient drew forwards the soft parts. Mr. Maunder then measured the distance from the top of the trochanter major to the shaft at a level immediately below the small trochanter—this spot being selected because it is the highest beyond the attachment of the numerous muscles which are inserted into the upper end of the femur. At this spot (and while the soft tissues are well drawn forwards) he inserts a double-edged knife down to and at right angles with the bone on the outer side of the limb, cuts through the periosteum, and then, before removing the knife, introduces the chisel, which is also kept at right angles to the axis of the

shaft of the femur. With a light wooden mallet the chisel is driven well into the bone, then partially withdrawn, to be again driven onwards, inclined somewhat obliquely forwards, and then backwards, so as to divide the bone in the rest of its thickness. While doing this the hand of another assistant is pressed upwards against the inner surface of the thigh, so as to make counter-force to the direction of the penetrating chisel. Finally, the limb is gradually and carefully extended, any small portion of bone which may happen to have escaped the chisel being at the same time broken down; lastly, a straight interrupted outside splint is applied.

The chisel—a separate one for each case—used by Mr. Maunder is three-eighths of an inch in width at the cutting edge, where it is wider than elsewhere; and three inches and a half long in the shaft. The operation is attended with next to no hæmorrhage, and the small wound in the soft tissues through which the chisel has been worked, becomes valvular and air-tight as soon as the tissues themselves are allowed to fall backwards into their natural position. A minute or two was the time required to complete the division of the bone in the case of the girl; in that of the man the process was longer, owing to the greater thickness and toughness of the bone. We are happy to state that up to the present time both patients are doing perfectly well.

Mr. Maunder showed to several visitors who had assembled to see the operation three cases in which it had been performed some weeks previously. All these three patients walked into the theatre—one man without the aid of stick or crutch—with limbs in nearly perpendicular positions, and with little or no lordosis. There necessarily, however, remains some deformity about and around the hip-joint. This is easily understood when it is remembered that there is anchylosis at an angle, and in some cases it has followed so-called dislocation from disease; while, as the division of the femur is made below the small trochanter, there is no attempt to correct the abnormal position of the upper extremity of the bone.

Mr. Maunder stated that in most of his cases there has been no suppuration whatever after the operation, and that it was very limited indeed in the case in which it occurred. This entirely coincides with the experience of Professor Volkmann, who also has employed the chisel instead of the saw. Professor Volkmann, however, used three chisels of different thicknesses to prevent the jamming and sticking fast in the deeper parts of the incision into the bone. The superficial part was divided with the stoutest, the deeper with a thinner, and the deepest with the thinnest instrument of all, so that the cleft was slightly wedge-shaped. Mr. Maunder, by a modification of the form of the chisel, finds it unnecessary to use more than one instrument.

A NEW METHOD OF TREATING SKIN DISEASES.

An instrument has lately been introduced by Hebra, jun., of Vienna, called the spoon gouge or scraper, the merits of which have been discussed at a late meeting of the New York Dermatological Society.

Dr. Bronson, who read an essay on the subject, said "That he desired rather to present the method to the Society than to express any conclusions in the matter, as the subject was yet too fresh in his experience to enable him to decide on its own merits. He believed, however, that the implement would eventually prove of much service in many affections of the skin. He recalled that Volkman first employed the gouge in treating epithelioma and lupus, to separate the morbid from the healthy skin, on the principle that sound tissue would not be penetrated by the blunt instrument, whereas the soft, diseased masses yield readily to it. But this was discovered to be insufficient in the more severe cases, because the new formation is found to run out along the vessels where the scraper would not reach it. It had been rather abandoned, until recently Hebra had revived its use, and lately there had appeared an article by Hans Hebra detailing the experience in its use under Professor Hebra during the past three years, in these and in certain other diseases, as eczema, psoriasis, condylomata, verruca, etc.

The chief value of the instrument was in treating diseases where the morbid product resides chiefly in the epidermal layer or in the

rete malpighii, for a large part of local treatment consists in removing these external elements. Thus in acne vulgaris the aim is first to clear the orifice of the plugged sebaceous follicle and to allow it to discharge and heal. This he claims can be more surely and satisfactorily done by the mechanical scraping than by any other measure, it at the same time stimulating and depleting that portion of integument; the quick, irritating action of the scraping is more efficacious than the slow removal of the obstructions by ordinary local means, its action resembling rather that of the actual cautery, where there is a sudden impression on the peripheral nerves. The irritation following the gouge subsides very soon. Dr. Bronson had treated one case of *lupus exfoliativus* with the gouge, scraping out hollows in the skin, he had treated one-half of the surface first, and thought the disease modified and the thickening less. He believed that caustics damaged more sound tissue than the spoon would. He had treated successfully some cases of *acne rosacea*, with marked follicular implication. After laying open the follicles, the discharge escapes and an oily dressing prevents the formation of scabs. He exhibited a case which had been under this treatment and showed good results: the operation of scraping was also shown.

The same had been used by Hebra in non-parasitic sycosis, with good effect, but the procedure was painful. Psoriasis will not be cured by this means but the diseased patches are modified by it more than by caustic applications. A patient with *psoriasis* was shown, and some patches upon the leg were scraped until some bleeding was induced, the pain being but very moderate and easily borne. In stating the further use of this method, Dr. B. said that warts were removed very easily by means of the gouge, also the venereal warts, or condylomata acuminata were very successfully treated with it. In cutting off these latter by means of curved scissors as commonly done, there was danger of taking away too much tissue, but when extirpated by the gouge only the diseased parts yield. In a case of *papilloma of the tongue*, the size of an olive, the disease was very readily scooped out, the hæmorrhage was profuse at first, but did not interfere with the treatment."

Dr. Piffard at the same meeting exhibited an instrument of his own invention, which he called an "epidermic hoe." He has used it for similar purposes as the spoon gouge.

CAN "PORT-WINE MARKS" ON THE FACE BE CURED? YES.

BY BALMANNO SQUIRE, M.B., LOND.

Surgeon to the British Hospital for Diseases of the Skin, London.

Few lesions of the skin are more hideously disfiguring than the congenital "Port-wine mark" of the face. I refer to the flat vascular nævus which may so often be met with in every country, causing the greater part (often) of one side of the face to present a livid, dark crimson colour, and conferring an almost demoniacal appearance on the unfortunate subject of this forbidding deformity. So many adults of all classes of society may be seen going about with this lesion in its pristine condition, that it is clear at once that nothing is commonly contrived for its relief, and a little experience of the views ordinarily expressed by practitioners on the subject suffices to prove that any attempt at interference with this deformity is commonly regarded by the profession with disfavour. By some, the possibly uncontrollable hæmorrhage is the fear entertained, by others, the scar that would ensue from the only means that seems to be free from the objection cited–cauterization–is properly a reason for refraining. However, as I have satisfactorily ascertained, the disfigurement can be removed without leaving any trace of its former existence, or of the means employed for its removal, and that by a very simple, safe, painless, speedy, and easy procedure.

For the purpose in view I employ a cataract needle, the head of which is made about four times the size of that of an ordinary cataract needle. With this needle I scarify the affected skin, making cleanly cut and parallel incisions over the affected area, and even also a little beyond it. The incisions are spaced apart one-sixteenth of an inch. In order to render the operation painless, and at the same time to prevent any flow of blood interfering with the draughtmanship of the lines, I first freeze the skin thoroughly by means of Dr. Richardson's æther spray apparatus. Having performed the operation over a limited area, I press on the scarified portion of skin with the fingers for about ten minutes, gently but firmly At the end end of this time all bleeding has definitely ceased.

During the pressure a piece of white blotting paper is interposed between the fingers and the skin. The only styptic I employ is that of pressure employed as above described. As to the depth of the incisions, they should be made of such depth as nearly to divide the entire thickness of the cutis vera. Within a fortnight, if deftly performed, the operation has done its work without leaving trace of any kind save a notable and most gratifying improvement. No scars are left by it. However, a precaution needs to be stated. No lateral traction must be made on the scarified skin either during or within half an hour after the performance of the operation. In exercising styptic pressure after the operation, this essential precaution must be kept in view. When, in any case, any traction has been accidentally made on the skin in a direction transverse to the direction of the cuts, they gape slightly in consequence. The gaping cuts become plugged with wedge-shaped clots, and, as an invariable fact, indelible linear scars are thus produced. If traction be avoided no trace is left of the operation. Sometimes one operation alone will not suffice, a second or even a third may be required. In such cases the direction followed by the linear incisions of the first operation should be carefully remembered, and at the second operation the parallel linear cuts should be made to cross obliquely the direction of the original cuts, say at an angle of 45°. If a third operation be needed the cuts should again follow a different direction, that is to say, they should cross the direction of the original cuts at right angles.

After the operation any exudation of clot or scab should be washed off carefully the next day by a soft camel's hair brush and cold soap and water, followed by a soft piece of sponge with cold water only.

The operation conducted as above is absolutely painless. Very slight temporary swelling follows it. No permanent trace is left by it. It does its work finally within a fortnight. No hæmorrhage accompanies it, nor is it attended by risk of any kind. It offers to a number of hideously deformed persons an escape from their misfortune which may be safely recommended, and confidently offered by any practitioner. The results obtained by it are at once gratifying to the practitioner and satisfactory to the patient.

FORK IN THE STOMACH—GASTROTOMY—CURE.

BY LABBE.

(*L'Union Medic.*, April 27th, 1876.)

A young man eighteen years old, desiring to imitate a juggler, swallowed a fork, whose points were held by his teeth. This he did with impunity several times, but finally, in consequence of a sudden movement induced by some pleasantry on the part of his companions, the part between his teeth slipped away and the foreign body lodged itself deeply in the pharynx. Neither he nor his affrighted companions could seize the fork with the fingers. Dr. Lepere managed to seize the prongs with a long pair of polypus forceps, but the patient pushed him violently away in consequence of the pain excited, when the fork buried itself still deeper in the œsophagus. The patient soon became free from pain and even jocose over his predicament.

In a fortnight, intense pain occurred with syncope, after the relief of which appeared a tumour of considerable size over the large extremity of the stomach. Each meal was succeeded by severe pain. A year passed, during which time he had intervals of great pain and comparative comfort. Six months of this period were employed in pursuing his ordinary avocation.

At this time, by means of certain exact manœuvres, he could make the prongs of the fork project between the epigastrium and the hypochondrium, so that it could be very distinctly recognized through the abdominal parietes—the act being more successful when the stomach was distended with aliment. His health and spirits were now profoundly affected.

Gosselin, Larrey and Lepere agreed, after consultation, upon surgical interference by the aid of caustics, but could not succeed in producing adhesions between the stomach and abdominal walls with either the paste of Canquoin or Vienna.

After numerous experiments and studies upon the cadaver, Gosselin, Larrey, Lepere, Coyne, and Mene-Maurice assisted the reporter in performing gastrotomy, April 9.

After anæsthesia by chloroform, L. in-

cised each layer separately, to the extent of 4 ctm., in a line extending parallel to the false ribs of the left side and 1 ctm. distant, and terminating in the imaginary line uniting the cartilages of the ninth ribs. Six successive applications of caustic had been previously made in this locality. The wound was kept open and the visceral and parietal layers of peritoneum were found ununited.

The anterior wall of the stomach was seized and drawn somewhat into the wound by a pair of forceps, then a loop of thread was passed through the fold and the latter brought into firm apposition with the lips of the abdominal wound. Eight points of suture were then made with strongly curved needles, through the stomach and abdominal walls—the point of each needle entering the stomach from without inward and escaping in an inverse direction. Thus the visceral and parietal layers of peritoneum were firmly apposed to the extent of 1 ctm. almost the entire periphery of the wound.

The stomach was then incised, the foreign body recognized (the prongs fastened in a mass of spongy tissue to the left of the wound in the greater curvature), and after exploration with a pair of long polypus forceps, the fork was seized and readily extracted.

Peritonitis was threatened, but a collodium "cuirass" upon the abdomen, with iced champagne internally, was followed by such improvement that in five days solid aliment was ingested. The cure is now complete, save for the existence of a rapidly contracting gastric fistula, which scarcely admits the little finger.

A Sensible Precaution. — When lunar caustic is used in the oral cavity, and towards the tonsils and larynx, fears may be entertained that the stick may break and cause dangerous symptoms. To make such an unpleasant accident impossible, Dr. Mettenheimer places the caustic in a little bag of gauze, through the meshes of which the former acts completely, the escape of the stick being effectually prevented. Of course the gauze should be changed at each cauterization, as the meshes are liable to get obstructed by moisture, and even to be destroyed by the caustic.—*Lancet.*

METHOD OF TREATING DISLOCATIONS UPWARDS AND BACKWARDS OF THE SCAPULAR END OF THE CLAVICLE.

Dr. Wm. H. Dougherty reports a case of dislocation of the acromial end of the clavicle successfully treated by himself, and quotes Dr. Hamilton, who says in reference to this dislocation,—"As to the maintenance of the bone in its socket for a length of time sufficient to insure a firm union of the broken tissues, this will be found always more difficult, and in a great majority of cases absolutely impossible. Nearly all surgeons who have written upon this subject have made the same observation." He also alludes to the fact that direct pressure upon the displaced end of the bone has been looked upon as the principal if not the only method of treatment, the chief obstacle to its retention in place being the powerful action of the trapezius. Using his case as a demonstration of the truth of his assertions, Dr. Dougherty proceeds as follows: The true method of treatment then for this injury is to render and maintain a state of high tension of the fibres of the important muscles connecting the humerus and clavicle, making the former, for the time being, the fixed point of action. To do this, you must draw the arm forcibly downwards and backwards in close apposition with the body. Fortunately it involves no painful restraint, no pads in the axilla, or other injurious means; simply a firm, wide strip of adhesive plaster, closely adjusted to the inequalities of the part. The side of the chest becomes a broad fulcrum to add the substantial leverage of the humerus to the direct traction already made, all of which contribute further to the immobility of the scapula, slightly rotated downward. *Mode of Application* —Provide a strip of adhesive plaster (spread on cotton flannel) five or six inches wide, and long enough to encircle the body; then, having reduced the dislocation by the manipulation before described, invest the arm therewith from the insertion of the deltoid to near the elbow, carrying the strip backward and around the body, taking such direction on its front as the inequalities of the person may suggest. The arm thus pinioned cannot be brought forward or elevated, but the security of its position requires the application of another strip over the whole, but not looped around the arm as in the first instance; the latter need not exceed three inches in width.—*Richmond and Louisville Medical and Surgical Journal.*

Midwifery.

OVARIOTOMY — RECOVERY — POST-MORTEM EXAMINATION AFTER SEVEN YEARS.

Under the Care of Dr. Hime, Hospital for Women, Sheffield.

Patient was forty-eight, married, and had six children. On Aug. 20, 1868, the Dr. made the usual incision in the median line, about four inches long, partially emptied the sac, and then tied the orifice, and explored the relation of the parts. The sac was throughout adherent to the anterior abdominal wall, but was readily detached. The pedicle was thin, about two inches long by one inch wide, growing from the uterine margin of the right lateral ligament. I then drew off the whole of the fluid (thirty-seven pints, clear, straw-coloured) from the single sac. The intestinal adhesions were numerous and strong, and their separation took a very long time; the knife was not used. Very strong adhesions also bound the sac in the neighbourhood of the liver. The pedicle was tied with whipcord and returned to the abdomen. The wound was closed by three deep and three superficial silver-wire sutures. She recovered without a bad symptom. On the twenty-third day after the operation she was up. The patient died, on Aug. 30, 1875, of heart disease with secondary ascites, &c.

The following day I made a post-mortem examination. The body was covered with a thick layer of fat. On passing my hand through an incision in the abdominal wall it was met by a compact, firm mass, filling the whole abdominal cavity. This consisted of the whole of the intestines, omentum, etc., matted together by quantities of lymph. It was impossible to remove even a short piece of intestine separately. On cutting through it the appearance was that of a solid body perforated by large canals (the intestines) in various directions. Yet she never suffered any intestinal inconvenience. The omentum was inseparably connected with the peritoneum above, as well as with the intestines below. No trace whatever remained of the strong whipcord ligature which tied the pedicle, nor could I even find a cicatrix or mark of where the pedicle had been. The left ovary was in its place and healthy. The kidneys were large and completely disorganised; all trace of cortical structure had disappeared, and the capsules readily peeled off. The liver, too, on section was found diseased throughout, and so soft that the fingers readily penetrated it; fat could be distinguished in it with the naked eye, in patches as large as a pea. The lungs and pleuræ contained a considerable quantity of serum, which escaped on section. The pericardium contained over a pint of bloody serum. The heart was greatly enlarged, its walls fatty; and a rupture existed in the wall of the right auricle, which was not thicker than a leather glove. The mitral and aortic valves were both much thickened, and on the latter were situated several nodules, one as large as a grain of wheat. Still it held water, though this by no means proves, as is often supposed, that it could withstand the blood-pressure brought to bear on it during life.

CASE OF VESICO-VAGINAL FISTULA.

Mr. Lawson Tait brought forward a case in which this condition remained fourteen years after lithotomy, and was cured by a series of plastic operations. In 1862 the patient underwent vaginal lithotomy, after which she went through a series of operative proceedings at the hands of different surgeons. In July, 1874, she came under Mr. Tait's care. Considerable loss of tissue had taken place by sloughing, atrophy, and attempted operations, so that a small pouch at the upper part of the vagina, not much larger than a walnut, represented the bladder. The patient suffered from phosphatic diathesis of the most inveterate description. During the eighteen months she was under treatment she was under the influence of chloroform some twenty-three times, and she had passed nine years of her life on a bed-pan. In July, 1874, Mr. Tait performed the first operation. The ureters were then visible, and the urethra was laid open for a long distance. On the first occasion the edges of the bladder only were pared, and these united successfully. In August the first attempt was made to close the urethra. Linear incisions, parallel to its course, were made

at each side, and the flaps dissected up towards the middle. No catheter was used. All went well for three days, but on the fourth night the urine dribbled away as usual. The wound was covered with an apparent slough, but this was found to be due only to phosphatic deposit. The flaps fell back, but no loss of tissue took place. In October the operation was repeated. By the advice of Mr. Napier, one of his self-retaining catheters was kept in. It soon became blocked, and had to be cleared, and on the fifth day the wound reopened, phosphatic deposit having taken place as before. In January, 1875, the operation was repeated, a metal catheter being used, and again in February, without any catheter. Both ended in failure. For the next nine months the patient underwent a course of mineral acids, and the parts were frequently brushed with strong carbolic acid. In November, 1875, it was considered whether to make a second opening into the bladder above the pubes, or on one side of the urethra, and the latter course was resolved on. A Boudalt's trocar was passed through the left vaginal wall, as far from the urethra as possible, into the bladder, and out on the other side close to the cervix. Through it a nickel wire drainage-tube was passed and fastened in. The operation was then conducted as before, and the result was most satifactory. The stitches and drainage-tube were removed on the sixteenth day; the wound from the latter, being valvular, closed without trouble. The patient has now complete control over the bladder, and can retain as much as ten ounces of urine, rarely requiring to rise more than once during the night, and never wetting herself during the day, except when nervous.

The President thought this an instance of the most unmitigated perseverance under the most difficult circumstances.

Mr. Spencer Wells had seen the patient operated on by Mr. Tait, and confirmed all that had been said in the paper as to the benefit which had followed the operation.—*Obstetrical Journal.*

Cod-liver Oil.—One and a quarter million gallons of cod-liver oil have been made in Newfoundland this season.

THE USE OF THE MICROSCOPE IN THE DIAGNOSIS OF OVARIAN CYSTS.

In a paper read before the Harveian Society, Mr. J. K. Thornton makes some remarks on the distinctions between ovarian and ascitic fluids. With regard to rough tests, he pays most regard to the presence in ovarian fluid of paralbumen, which is soluble in strong boiling acetic acid. A fluid which forms a considerable coagulum on heating, which coagulum is either entirely dissolved or turned into a transparent jelly by adding an equal volume of strong acetic acid, and continuing the boiling, is probably from an ovarian cyst. If the coagulum is only partially dissolved or gelatinized by boiling with excess of strong acetic acid, the fluid is probably a mixture of ovarian and ascitic fluid. Mr. Thornton attaches value, as a means of diagnosis in a doubtful case, to the presence in ovarian fluid of what has been called the ovarian granule of Drysdale. This is a little round delicate cell, full of brightly refractive granules, the cell being commonly about the size of a white blood-corpuscle. It may be distinguished from the latter and lymph corpuscles by its resisting the action both of acetic acid and ether, neither making any distinctly perceptible change in its appearance, except that the former renders the granules, which are irregularly scattered throughout its interior, rather more distinct. Certain grape-like groups of cells, found in ascitic fluid poured out around an abdominal tumour, have been described by Dr. Foulis as affording certain evidence of the malignant nature of the tumour, if it be ovarian. Mr. Thornton, however, has found them in the peritoneum when irritated by the rupture of an ordinary ovarian cyst. When, however, they are numerous, and in various stages of growth, he attaches much importance to them as indicating malignant disease, including in this term both the rapidly growing sarcomas and carcinomas, and certain peculiar ovarian papillomata. He thinks that tumours of the latter kind are simple, if removed early, but that, if the fluid escapes into the peritoneum, they become clinically malignant, because universal papilloma of the peritoneal surfaces results. He believes, therefore, that, if such cell groups be found in any ovarian fluid, the tumour should be at once removed.—*Medical Times and Gazette.*

TREATMENT OF PLACENTA PRÆVIA.

In a paper on this subject, published in the *American Practitioner* for June, Dr. Parvin, of Indianapolis, advises, in conformity with the teachings of Greenhalgh and Thomas, the induction of premature labour, and expresses a belief that the mortality of both mothers and children in cases of placenta prævia, will undergo a marked diminution when this is adopted by the profession as a rule of practice. He considers Barnes's dilators to be the safest and best means for the induction of the premature labour, and they moreover bring it on more rapidly than any other means. The vaginal tampon is difficult of application; is uncomfortable to the mother; does not remove the possibility of a dangerous internal loss of blood, and possibly may lead to a separation of the placenta and death of the child. Ergot is objectionable, except when the os is well dilated or dilatable and the labour can be speedily terminated, for the tetanic contractions it excites are apt to asphyxiate the child. Puncture of the membranes is obviously dangerous for the child, and as far as the mother is concerned is not free from danger, as it may possibly change an open into a concealed hæmorrhage. Podalic Version increases the risks to the child's life, and probably may be limited almost, if not altogether, to cases of shoulder-presentation. Complete separation of the placenta, as advised by Sir James Simpson, is a method which ignores the child's interests, and has never received any general professional support. Finally, the partial detachment urged by Dr. Barnes does not seem to be a rational mode of treatment, for it simply increases the bleeding surface.—*Medical Record.*

The caution contained in the conclusion of Dr. Thomas's remarks to the *New York Obstetrical Society* should always be kept in mind. He says, "Of course the diagnosis should be correct, and a granular endocervicitis, producing occasional discharge of blood, should not be mistaken for placenta prævia."

The King of Belgium has just placed the Palace in the Rue Ducale at the disposition of the Academy of Medicine of Brussels.

THE WEIGHT OF NEW-BORN CHILDREN.

Dr. E. Ingersley (*Lond. Obstet. Jour.*, March, 1876), from an extended series of researches on the loss of weight in infants, reaches the following results: Every child loses weight during the first days of extra-uterine life. An increase may occur on the first day if the meconium have escaped during birth, or if it have not been discharged before the first weighing, and the child have sucked in the meantime; but this increase is only transient, and the loss of weight shows itself at the second or third weighings.

The loss corresponds to one-fourteenth or one-fifteenth of the body-weight, and is both absolutely and relatively greater in children of primaparæ. It was greater in boys than in girls, but was more rapidly compensated in them. With regard to the original weight of the body, the loss is greater the less developed the child is, and in the same proportion the increase is more delayed; premature children show a corresponding relation. The increase begins, as a rule, on the fourth day. As regards the conditions influencing the loss, no connection can be found between the detachment of the umbilical cord and the commencement of the increase; but the chief importance must be attached to the relation between the egesta and ingesta. About half the loss can be ascribed to the meconium and urine. The remainder of the loss must be applied to a consumption of the child's structure, to apply the forces needed to live. The child cannot eat enough to compensate for this loss. The consumption of tissue and consequent loss of tissue are a physiological necessity.

Incontinence of Urine.—Mr. Brenchly writes to the *Practitioner*, that he has seldom seen much good done in the above disease by belladonna, iron, or bromide of potassium, but has met with much success with the following combination of ergot and iron:—

℞ Tinct. Ergotæ, *m*x.
Tinct. Ferri Perchloridi, *m*v.
Spt. Chloroformi, *m*v.
Infusi Quassiæ, ad ʒi, ter die sumend.

Ophthalmology.

GLAUCOMA.

In a clinical lecture on a case of glaucoma, by Dr. Charles Bell Taylor (*Medical Times and Gazette*), an instance is given of the radical effect of iridectomy in this disease. A needle-woman, æt. 50, with progressive failure of sight, coloured vision, inability to use the eyes comfortably with spectacles (asthenopia), contraction of the field of vision, and abnormal hardness of the eye-balls, &c., had a speedy and complete relief by the operation. Hardening of the globe from increased intraocular secretion is the essential feature of the disease. This develops slowly in the simple, chronic, non-inflammatory form, often requiring several years; in the sub-acute or remittent, in a few months; in the acute or persistent, in a few weeks; and in the fulminating, in a few hours. Suspicion of simple glaucoma should be excited when patients from 45 years, especially females, with a fair degree of far vision, have unwonted difficulty or discomfort at near work with suitable spectacles. In simple cataract the vision for distance deteriorates more rapidly than for near objects, and the tension is not increased. Cases of apparent iritis or sclerotitis or recurrent inflammatory attacks, with more or less hardness of the eyeball, pupil sluggish, or perhaps, dilated, and subjective sensations of the air being foggy, and coloured rings around the flame of gas or lamp, &c., point to the inflammatory forms of glaucoma. The latter may also occur secondarily to diseases of the cornea, as interstitial keratitis, excessive swelling of the lens after keratonyxis, luxation of lens, blows upon eyeball, &c. An early diagnosis is very important. A timely iridectomy in uncomplicated cases will cure, and even when delayed till organic changes have ensued, as a rule, the disease is stayed and failure of sight arrested. A little practice soon enables one to detect abnormal tension of the eye by palpation. In doubtful cases the ophthalmoscope shows recession or "cupping" of the optic disk (due to pressure), which is pathognomonic of the disease.

Translations.

Primary Cancer of the Spleen.

Translated from *Progres Medical*, Sep. 2, 1876.

John Banelet, a carpenter, fifty-one years of age, was admitted into the Hospital of La Charite, on the 5th of April, 1876. He had been ailing for several months, and had lost strength. He says that at the beginning of his illness he passed blood from the mouth, but is unable to say whether the blood came from the stomach or from the lungs. He suffers from indigestion, but has no vomiting. He is subject to alternate diarrhœa and constipation. There is noticeable emaciation; the complexion is of a leaden hue, and the general appearance cachectic. Auscultation reveals nothing remarkable. The belly is enlarged. Under percussion there is dullness of the epigastric and umbilical regions; on pressure, a doughy feeling is perceptible, suggestive of chronic peritonitis.

Diagnosis: abdominal cancer, situated probably in the stomach. The patient gradually became weaker, and succumbed on the 13th of April.

Autopsy:—The cranial cavity revealed nothing remarkable; the colour and consistence of the brain were normal—no excess of cerebro-spinal fluid.

Thoracic Cavity:—The lungs were healthy, and there were no tubercles. At the apex of the left lung, there existed a slight induration, but tubercular granulations were nowhere to be seen. The pleuræ were intact. The heart was normal as to the consistence of its tissue; the orifices were healthy.

Abdominal Cavity:—Intestines were distended with gas; small miliary granulations were plainly to be seen on their surface. Adhesions and false membranes existed between the stomach and loops of the intestines, forming a large cavity, which, when cut into, allowed the escape of a considerable quantity of serous pus.

At first it was thought that the stomach had been opened, but this viscus was, in fact, intact, and constituted the upper boundary of the cavity.

The Stomach was now removed and opened. Neither the walls nor the lining mucous mem-

brane showed any alteration ; both its orifices, and notably the pylorus, were perfectly healthy. The intestines were removed and incised as far as the anus ; nothing abnormal was to be seen throughout their entire length ; the rectum and anus were both intact.

In the substance of the liver, a few miliary granules were to be seen ; the diaphragm was adherent to its upper surface, and a small growth, plainly cancerous, projected into the right pleural cavity. The spleen, however, and the prevertebral ganglia of the lumbar region, were much altered.

The spleen was greatly enlarged, and measured twenty centimetres, both in length and breadth, and was of wood-like consistency ; it was, moreover, perfectly smooth, and without any ridge or projection. On cutting into it, it had everywhere the same appearance. The tissue was red, almost hæmorrhagic, and embedded in it there were bodies of a yellowish, white colour, difficult to cut, some of them were slightly softened in the centre. They measured from one to one and a-half centimetres in diameter, often less ; they were rounded, and their number was such, that in a given section they occupied more space than the splenic parenchyma. The capsule was strongly adherent to the tissue of the viscus.

The lumbar ganglia formed three groups, of which the uppermost, about the size of a small nut, was situated above the body of the pancreas, on the outside and to the left of the head of the pancreas. The two others were situated in front of the aorta, compressing it, and placed across the vessel so as to form a bilobed tumour, somewhat analogous to the hyper-trophied lobes of the thyroid body, but united by a smaller bridge.

The substance of these ganglia exhibited the characteristics of cancer. The calibre of the aorta, at this point, would not admit the little finger. The tumour thus formed, extended from the pillars of the diaphragm to the bifurcation of the aorta, and was as large as the fist.

Sections made of the sternum, ribs, and vertebræ showed numerous deposits of cancerous matter.

The record of this case, although imperfectly given, has appeared to us to be worthy of publication, because of the rarity of primary cancer of the spleen, any previous account of which, it may be said, is entirely unknown.

It is rarely that we find this organ invaded by secondary cancer, and in the present case we must reject the hypothesis of cancer originating in the lumbar ganglia, since the latter are proportionally much less liable to change than the spleen. Primary cancer is even still more rare, since but a single case is cited by Besnier in his recent article upon this subject, in his Dictionary.

Does this cancer rapidly invade the adjoining tissues? We cannot say. We can only state that in this instance it had invaded the lumbar ganglia, the liver, the pleura, the peritoneum, and the bones.

In this case, it is to be especially noted, there was no cancerous alteration of the stomach, or of the rectum. These viscera were scrupulously examined in reference to this, because the determination of this point was a matter of primary importance.

On the Methods of Elimination and on the Elective Action of Quinine.

Under this title Drs. Albertoni and Ciotto contribute the details of certain experiments made by themselves to the *Bull. Gén. de Thérap.*, Nos. 8 and 9, 1876. They show—

1. That the presence of quinine in the bile may be demonstrated in from two to five hours after its introduction into the stomach.

2. The elimination of quinine by this path is quite active, since it is found only two hours after ingestion, and after the ingestion of sixty centigrammes (9 grains) only. It is found also that in the dog it produces, in twenty-four hours, an average secretion of 400 grammes of bile.

3. Though quinine may be found in the bile, sometimes, until two and a-half hours after ingestion by the mouth, this is not against the fact that its proper route for elimination is through the hepatic secretion, since, as is known, this is much less rapid than elimination by the urine.

To MM. Albertoni and Ciotto the positive result that the biliary secretion contains quinine administered by the mouth appears

important. The common mode of entrance of quinine, as of almost all medicines, is by the digestive tube. In the stomach its absorption is favoured by the acids present, particularly by the hydrochloric acid, while in the intestine, on the contrary, this is rendered less easy by the alkalinity of the enteric and pancreatic secretions, and still less by the biliary acids which form insoluble combinations with quinine, though these last are soluble in excess of acid. Thus the absorption of quinine in the intestine only takes place sparingly under physiological conditions. Once entered by gastro-enteric absorption into the portal circulation, quinine finds a natural anatomico-physiological route for elimination in the biliary secretion. This fact the experiments of Messrs. A. and C. *positively* demonstrated.

The presence of quinine in the biliary secretion serves to establish the important fact of its *electivity of action*, since its shows how this alkaloid places itself in intimate contact with the hepatic cells, constituting the functionating element of the liver, of which the bile is the complex product of secretory elaboration. Quinine, therefore, introduced by alimentary passages, appears to stop by preference in the liver and in the spleen.

As regards the question whether quinine introduced into the circulation by other routes than by the portal system is eliminated by the bile or by the urine alone, Messrs. Albertoni and Ciotto find that, hypodermically injected, quinine is eliminated by the urine, an important fact in practice, for it is thus useless to administer the remedy by this method if we expect to affect the liver and spleen. Quinine, taken by the mouth, is in part eliminated directly by the portal circulation without passing into the general venous system. As regards the length of time during which quinine remains in the organism, it has been found in the urine sixty-eight hours after ingestion. Finally, quinine was always found by MM. A. and C. in the spleen, nearly always in the liver, viscera in which it remains for the longest time. In the heart, quinine is found in larger quantity when introduced hypodermically than when taken by the mouth. In the brain it appears very quickly, but in smaller quantity than in the other viscera mentioned.

On the Possibility of the Mother of Children, affected with Hereditary Syphilis, remaining Healthy.

By Dr. Caspary, Konigsberg.

All investigations made up to the present time leave the question still undetermined, as to a mother remaining healthy who has children suffering from hereditary syphilis. There are many observations in literature, where women have answered in the affirmative, and others where they have answered in the negative. The circumstance, however, that a mother of syphilitic children cannot be infected by nursing them, has never been contradicted.

Caspary relates a very important observation bearing on the solution of this question :—

A recently married man was infected with syphilis. The wife knew of the infection, and guarded herself in every possible way in order to prevent her taking the disease. And, notwithstanding that she nursed her husband through the disease, which ran an unusually severe course, she remained healthy. Two years after she became pregnant, and aborted at the fifth month. The fœtus was macerated, and the placenta gummy. The woman wished to know whether she ought to undergo syphilitic treatment or not. Caspary proposed to her to allow him to infect her with syphilitic poison, explaining to both the possible consequences of the infection, and the importance which an unsuccessful result would demonstrate.

The proposal was accepted, and Caspary infected the woman in four places on the left arm with the secretion from a condyloma mixed with blood. The infection was unsuccessful.

Along with this, Caspary made very close observations on a case in which a healthy nurse became affected through a strange syphilitic child. Primary sore on the nipples, secondary syphilis, infection of the healthy child of the nurse ensued. — *Medicinische-Chirurgische Rundchau.*

Transparent Gum.—A little glycerine added to gum or glue is a great improvement, as it prevents the gum or glue from becoming brittle. It also prevents gummed labels from having a tendency to curl up when being written on.

THE CANADIAN

Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glaa to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, OCTOBER, 1876.

INTERNATIONAL MEDICAL CONGRESS.

The International Medical Congress met at Philadelphia on the fourth of September. A large number of delegates were present, not only from the United States and Canada, but also from older and more distant countries. On looking over the names of those who attended, one cannot but notice the absence of many whom one would have expected to have been present, and this, perhaps, was the more noticeable among those from Great Britain. Still, those who did attend were unquestionably representative men, and we think it doubtful if so large a number of prominent members of the profession was ever before brought together on this continent.

We are not by any means convinced that as much advancement in medical science is made at the meetings of large bodies as is accomplished in the weekly meetings of societies, where shorter papers are read, and where the discussions are freer and more open, and are illustrated frequently by the production of cases. True, at these meetings there is not that interchange of thought and experience which is afforded when men from different countries and from different sections are brought together, still we maintain that it is at the meetings of these smaller societies that the greatest progress is made, and it is here, too, that men have a greater opportunity of keeping themselves familiar with subjects in which they are not immediately interested in practice.

In saying this, we do not wish, in the slightest degree, to detract from the good which the International Medical Congress achieved. Where so many of the leading lights of the profession were brought together from different parts of the world, a number of the papers read could not but be of interest, and the discussions only such as might be expected from men well versed in their profession. Then, too, the mere fact of bringing together men from different parts of the world is undoubtedly of service, especially when, as in Philadelphia, so many opportunities were afforded for social intercourse.

The work of the Congress was divided into nine sections: Medicine, surgery, obstetrics, biology, syphilology, opthalmology, otology, sanitary science, and mental diseases. These sections met every afternoon in the different rooms allotted to them, and at the same hour. This plan of division has, of course, this objection, that two papers or discussions might be proceeding at the same in which one might be interested, and it would be impossible to attend both. With such a programme as had been arranged by the committee, it would have been impracticable to have accomplished the work in the time allotted.

The morning of each day was devoted to a meeting of the whole Congress—three reports of sections and committees were received, and following came addresses on different branches of medical science, delivered by men, all of whom were authorities in the subjects upon which they spoke.

In the evenings the delegates were not idle. From Monday till Friday evening there was a succession of receptions and dinners, which gave the delegates that opportunity for social intercourse which was not the least object of the meeting. Of the hospitality of the profession and citizens of the "City of Brotherly Love," too much praise cannot be given; they will, at least, have the satisfaction of knowing that their kindness was appreciated by all present, and that their entertainments were in every way a success.

The profession of Philadelphia, and more especially those who had the immediate responsibility of the arrangements for the Congress, are deserving of and indeed received the thanks of all present. They laboured long, and unques-

tionably they laboured well; it must have been a great source of relief to them when the last day drew to a close.

One cannot allow any notice of this Congress to go forth without congratulating those present on the choice made of a President, a more dignified and gentlemanly chairman than Prof. S. D. Gross could not have been selected. It was a fitting tribute to his long life of labour in the cause of medical science. The selection of Vice-Presidents, too, was in every way a happy one, the honour being conferred on many of note from foreign countries.

It will be impossible in the limited space at our disposal to give a synopsis of the papers read and the discussions which ensued that would be of any service to our readers. A committee on publication has the matter in hand and a volume of the Transactions will shortly be issued to which we refer those of our readers who may wish for a report that would be of any practical value. In another column will be found information as to where this report may be obtained.

Canada Medical Association and American Medical Association.—A meeting of the Joint Committee of Conference appointed by these two organizations was held at the Jefferson Medical College on September 2nd, at 12 o'clock, noon.

Present: Drs. Edward H. Trenholme, J. A. Grant, F. W. Campbell, E. Robillard, of Canada; and Drs. H. J. Bowditch, E. Andrews, Samuel D. Gross, John T. Hodgen, and William B. Atkinson, of the United States.

On motion of Professor Gross, Dr. J. A. Grant, of Canada, was requested to preside; and Dr. William B. Atkinson, of the United States, to act as Secretary.

By request, the Secretary read the following communication, as explanatory of the conference :—

Moved by Dr. Grant, seconded by Dr. Hingston—

"That in consideration of the best interests of medical science, it is desirable that a Medical Conference should take place between the American and Canada Medical Associations, at some central point, to be determined upon, and that the Americal Medical Association be advised as to the desirability of thus becoming more intimately acquainted, and affording opportunity for the discussion of medical and surgical subjects on a common basis.

"Which motion was unanimously agreed to, when Dr. Hingston, seconded by Dr. Botsford, moved—

"That in the event of such a conference being determined upon, it would be desirable that the Secretary of the Canada Medical Association notify the different members, so that they may take part in a manner worthy of the occasion and in keeping with the best interests of medical science.

"Which motion was also unanimously adopted.

"A true copy from the minutes.

"S. H. David, M.D.,

"*General Sec. Canada Medical Association.*"

Dr. Grant, in an able speech, explained more fully the desires of the Canada Medical Association.

The subject was then discussed by Drs. Bowditch, Andrews, Campbell, Trenholme, and Gross.

Dr. Andrews then offered the following resolution, which was unanimously adopted :—

Resolved, that in the opinion of this Committee, the interests of medical science will be promoted by a consolidation of the American Medical Association and the Canada Medical Association in one body.

On motion of Dr. Gross, seconded by Dr. Andrews, it was unanimously

Resolved, That the President of the American Medical Association and the President of the Canada Medical Association be requested to embody this idea properly and emphatically in their addresses before their respective Associations.

On motion the Conference adjourned, with thanks to the President and Secretary.

Medical men desirous of possessing the forthcoming volumes of Transactions of the International Medical Congress, can obtain them by forwarding $7.00 to Dr. Caspar Wister, 1303, Arch Street, Philadelphia.

Communications.

To the Editor of the CANADIAN JOURNAL OF MEDICAL SCIENCE.

THE OPHTHALMOLOGICAL CONGRESS.

The International Ophthalmological Society held its Quadrennial Congress in Chickering Hall, New York, on Tuesday, Wednesday, and Thursday of the week following the Congress in Philadelphia. In addition to members of the profession, scientists interested, directly or indirectly, in ophthalmology were eligible for membership. It was expected that the interest of the meeting would be heightened by the presence of Helmholtz, the inventor of the ophthalmoscope, Donders of Utrecht, author of the classic work on "Anomalies of Refraction and Accommodation," published by the Sydenham Society, and other notables from Great Britain and the Continent. The dangers of the deep, unfortunately, deterred many from attending, whose disciples would have gladly welcomed them. Their absence was the more to be regretted as, *on dit*, the American Ophthalmological Society, who entertained the foreign members as guests, had, with characteristic enthusiasm and generosity, raised a fund of $10,000 to meet contingent expenses. The profession of Great Britain were, however, worthily represented by Dr. Argyll Robertson, of Edinburgh, and Mr. Brudenell Carter, of London, Ophthalmic Surgeon to St. George's Hospital, &c., and lately appointed Hunterian Lecturer on Surgery to the Royal College of Surgeons. The latter was elected 1st Vice-President, Dr. Williams, of Cincinnati, being President. The papers and discussions were of a high order, and largely practical. The former were referred to a publishing committee, with Dr. Knapp, of New York, late of Heidelberg, as chairman. The discussions were reported by a stenographer. To mention all the papers and readers, &c., would be merely uninteresting, and a full review of the work of the Congress must be deferred until the Transactions have appeared.

Various ingenious instruments and apparatus were also shown. Argyll Robertson showed a beautiful little trephine, modified from Bowman's, for trephining the sclera, a procedure he advocates in certain cases of glaucoma in lieu of iridectomy; and also fine carbolised catgut ligatures, which are absorbed in situ without suppuration.

Dr. Knapp showed patients from whom a portion of the optic nerve with investing tumour had been removed, the eyeball being saved.

There seems to be a mania for specialism; witness the number in this department from all parts of the Union, New York and Brooklyn alone, having thirty oculists, more or less. Those who do not care to discover a new disease, or a new departure in treatment, contribute their quota with provoking prodigality in new instruments and costly apparatus. So that one would require to exact large fees, and plenty of them, to get one-half of the formidable array now at the disposal of the specialist.

Of course, the social element was a prominent feature of the Congress. Drs. C. R. Agnew and H. Knapp gave receptions on Tuesday and Wednesday evenings, respectively, and on Thursday, the American Ophthalmological Society entertained their guests at a dinner served in the famous Delmonico's best style. Amongst other celebrities, Mr. Walter, proprietor of the London *Times*, represented the laity, and happily expressed himself in terms of cordial interest and appreciation, which were doubly pleasant to one accustomed to the deliverances of a certain would-be-oracle. It was also highly gratifying to hear Dalton, the physiologist, give his testimony of respect for the well-earned, advanced position of ophthalmology. The successful working of the Congress was largely due to the indefatigable efforts of Dr. Roosa, of New York, secretary of the provisional committee of arrangements. On invitation of the Mayor, an opportunity was afforded the members to visit the important charities on Blackwell's Island.

The International Otological Congress was organized on the day following the adjournment of the sister society. Dr. Roosa, whose reputation as an author and teacher fully entitled him to the honour, was elected the first president. Several papers of interest were read, to which I shall probably refer hereafter.

R. A. REEVE.

Toronto General Hospital Reports.

Aneurism.—Reported by Mr. Orr and Mr. Langstaff.

Enoch Baker, aged thirty, married, parents, brothers and sisters all living, always a strong healthy man, never had any sickness, except an abscess on his neck several years ago. On the 1st of January, 1876, he received a blow from the end of a crow-bar, while lifting a heavy stone, on his right inguinal region. It caused great pain for the time, but he continued work for four or five days longer, when he had to desist on account of the pain and stiffness in leg and impediment in walking. Shortly after injury two small lumps were noticeable, which gradually increased and amalgamated, and by first of February, were about the size and shape of a pig's kidney, according to his wife's statement. From this time his limb commenced to swell, the pain about the knee was most intense, sometimes shooting down into the foot. As the swelling increased the pain became more referable to seat of injury. There was also considerable constitutional disturbance. After he had been under medical treatment for some time, Dr. McCollum saw him on the nineteenth of April, when he pronounced it an aneurismal tumor, it now being somewhat larger than a goose-egg. He gave aconite and put the patient to bed and had the foot elevated. During May his leg swelled to an enormous size, the pain at times, both in leg and tumour being almost unbearable. As he was now forced to keep in bed all the time, swelling in limb decreased considerably. During the middle and latter part of his illness he was attacked by several paroxysms of violent delirium, during which he was almost uncontrollable, on recovering from which he would be deathly pale, and the pains in limb much more severe. He entered Toronto General Hospital, under care of Dr. W. T. Aikins, June 18th, the aneurism had extended across the mesial line, the aneurismal bruit of which could be heard over the greater part of the abdomen. Pulsation was quite perceptible when standing a considerable distance from the bed. The aconite treatment was continued with other remedies to relieve symptoms as they appeared, the foot of the bed being elevated about fourteen inches, his limb still continued much swollen, with very severe pain in aneurism. The sac now increased to an enormous size, and during the last week became somewhat thickened. During the month of September he was seized by a paroxysm similar to former ones, recovering himself for a moment, he placed his hand between his legs, lifted it up, looked at it, and exclaimed, "I am bleeding to death!" and in a few minutes he was no more. Post-mortem was performed by Messrs Langstaff and Stuart, and presented the following appearances :—

Before cutting down upon the tumour it presented a very large extent of surface, covering the greater part of the pelvic cavity, but principally its right side, extending upwards betweeen two and three inches above the umbilicus, and downwards about four inches below Poupart's ligament. The surface seemed very much hardened and thickened, and the right leg much larger than the left. On making an incision the intestines, stomach, and liver had to be removed before any progress could be made. The tumour then appeared to extend up as far as the diaphragm, principally on the right side, filling the right iliac fossa and the greater part of the left. On the surface, over the left iliac fossa, appeared an elevation about the size of a hen's egg; its walls were very thin. There was no rupture to be detected throughout the whole sac. The under-surface of the sac was closely adherent to the bodies of the two last lumbar vertebræ, the anterior surface of the sacrum, and partly to the anterior surface of the inner extremity of two or three lower ribs. The tumour was easily removed from the right iliac fossa, the periosteum coming away readily with it. The inferior spinous process of the ilium was eroded from caries, and a greater part of the body of the pubis. The whole sac was filled with a large firm clot which had to be removed in portions; the clot, after removal, filled a large wash-basin.

Case of Spontaneous Fracture of Ulna.—Reported by Mr. Orr.

James Madden, aged 42, single, Irish, in Canada since 1856. Father died from some form of fever while he was but a boy. Mother

still alive, aged 70. Had four brothers and five sisters, all of whom are living. Never had any sickness until he was seventeen years old, when, a short time after joining the army, he had a bubo on his left inguinal region, which was lanced forty-eight hours after it was noticed, and was entirely well in thirty days. Had no other disease, no eruption on skin at any time. Had the olecranon process of left ulna fractured during the Crimean war. During October, 1874, felt unwell; had rheumatism through all his bones, sore throat, &c. Entered Hamilton Hospital about first November with intermittent fever and liver complaint, which place he left, being tolerably well, in February. His general health continued good, with the exception of rheumatic pains, until July 1875, when he got a wetting which increased the severity of the rheumatism. He also noticed his right arm commencing to swell just below the elbow, and about ten days after his hand began to feel numb, he then ceased work, and entered Toronto General Hospital, in October, 1875. The forearm now became greatly enlarged, skin over which was white, tense, and smooth to the touch, no pain on pressure, and nearly all the movements lost. He lost flesh rapidly until he had to take to his bed. These general symptoms continued until last March, when he came under the care of Dr. J. E. Graham, who prescribed:—

℞ Potass. Iodidi, ʒiii.
Syrup Ferri Iod., ʒi.
Aq. ad. ʒviii. Sig. ʒss ter. in die.

Under this treatment he seemed to improve rapidly. The shooting pain up and down his right arm became less severe, the arm also decreased in size and became nodulated, a similar node presenting itself at same time on the inner side of left tibia. These all went away gradually, though right ulna still continued somewhat enlarged. His general health was so much improved that he considered himself almost well. The different movements of the forearm could be performed almost as well as ever and considerable power had returned. He was, however, doomed to disappointment, for on the tenth of August, while standing quietly in the ward, he felt a "dead blow," strike him just below the elbow, which was followed by something snapping, he then looked on the floor to see what struck him, there being nothing, he went to the door of the ward, but no person was there, now examining his arm he found it was swelling fast, that he had lost nearly all power over it, and that he heard a peculiar sound in it when it was moved. Dr. Graham examined it shortly after and found the ulna of right arm fractured about the junction of upper with middle third of bone. At present his general health is improving, pulse 75, feet and legs œdematous, tongue clean, appetite moderate, thirsty sometimes during the night, bowels inclined to be loose. In the early part of his sickness they were very costive sometimes, ten days passing without a motion, slight tympanitis, urine very acid, albuminous, and contains hyaline casts, rheumatism still continues in all his bones.

Although there is some difficulty in finding out when the initial lesion took place, there is no doubt but that the patient is now suffering from tertiary syphilis, and the spontaneous fracture is due to disease of the bone.

Popliteal Aneurism—Cure.

J. O., aged 15. Always a very healthy boy. On the 24th February, 1875, received a wound from an old knife, thrown by one of the scholars while playing at school. It entered on outer side of right knee, anterior to tendon of biceps. Passing between tendon and bone to a considerable depth into popliteal space, Bleeding not very profuse. Spurted for a few minutes but was readily controlled. Knee and leg became considerably swollen. Leg partly flexed, and could not be straightened. First seen by Dr. Pattullo (Brampton) on the 28th February, who, from the appearance of the part and the situation of external wound, considered it merely a slight inflammation, and treated accordingly. Swelling continued, pain increased, and came on in paroxysms, which were almost unbearable. Dr. P. saw him again on March 5th. An aneurismal tumour was now readily detected in popliteal space, about the size of an acorn, pulsation and bruit in which were most marked. The leg was partially flexed

upon the thigh, increasing the flexion little by little, on account of the intense pain it produced. The tumour gradually increased in size, laterally to hamstring muscles, vertically about $2\frac{3}{4}$in. in extent. Leg was bandaged to remove swelling which was increasing so rapidly. Circumference of knee was $2\frac{1}{8}$ inches greater than left. Pain very severe in region of patella. To relieve which a chloroform liniment was applied. Chloral hydrate and morphia to procure sleep. His parents removing to Toronto, he came under the care of Dr. W. T. Aikins, who continued former treatment (flexion), he was progressing so favourably. On the 22nd the knee was 2 inches larger than left, and on 26th, was only $1\frac{3}{4}$. Tumour was considerably reduced, especially in its lateral dimensions. From this time nothing more, seemingly, could be gained by flexion. The swelling having almost entirely subsided, the tumour seemingly took advantage of it to again increase in all directions. Pain became much more severe. Patient's strength was failing rapidly, scarcely any appetite. Dr. Aikins now thought it best to resort to digital compression of femoral, which was commenced on the 2nd of April, at 8.30 a.m., and kept up continuously for 80 hours. The bruit and pulsation decreased gradually until the evening of the fourth, from which time until the following evening, there was no perceptible change, except that the coagulum, formed on walls of sac, was becoming much firmer. The leg, which all along had been flexed at nearly a right angle, was now straightened out by means of continuous extension. On April 8th, Dr. Aikins administered chloroform, and broke up the clot which was now quite firm, *digital compression* being immediately resumed on femoral. In less than five hours neither bruit nor pulsation could be detected; but to make assurance, doubly sure, pressure was continued until 12 noon, the following day. No bad after-symptoms occurred. Circulation still continued in leg and foot as formerly. Pain and redness continued in popliteal space for few days, but gradually subsided. In two weeks the patient was able to sit up. In three, was able to use his foot a little. In five, to use it entirely, though the leg was not quite straight. The tumour, which was still a considerable size, was gradually decreasing, and had entirely disappeared by January, 1876.

Miscellaneous.

Dr. Grenier, editor of the *Union Medicale du Canada*, is dead.

Prof. Hermann Eberhard Richter, editor of *Schmidt's Jahrbucher*, died in Dresden, on the 24th of May, aged 68.

Sixty-four Deaths from Small-pox occurred in Madrid in January. Only five of the individuals had ever been vaccinated.

Dr. Geo. H. Napheys, author of "The Physical Life of Woman," "The Transmission of Life," and a work on "Therapeutics," died in Philadelphia, on 1st July.

The doctors of Melbourne have passed a resolution in their medical society affirming, after a long debate, the utility of Prof. Halford's intravenous injection of ammonia in cases of snake bite.

Mr. Victor de Meric and Dr. Sibson of London, England, died last month. The number of deaths among the Profession during the past two months has been unusually large.

Vincent Duval, the distinguished French orthopedist, died in April at the age of 80 years. He was the first in France to perform tenotomy of the tendo Achillis. Joulin used to ridicule him by the description "grand homme, grandes moustaches et grand couleur."

Dr. Walter Channing, for forty years Professor of Obstetrics and Medical Jurisprudence, in Harvard University, died near Boston on the 21st of July. He was, probably, the oldest physician in the United States, having been born in Newport, on the 15th of April, 1786.

Removal of Fibroid Tumours by Gastrotomy.—Professor Hegar reports two cases in which large fibroid tumours were successfully

removed, by taking away with them the uterus and ovaries; utilizing the neck of the uterus as a pedicle, and fixing it in the lower angle of the wound, as recommended by Pean.

Poisoning by Carbolic Acid.—As this acid is now so extensively used, it may be of some importance to make known the antidotes which have been proposed. M. Ferrand advises the following:—White sugar, 15 parts; water, 40 parts; quicklime, 5 parts—forming a saccharate of lime.—*Lancet.*

Spina Bifida.—In the *Annali Universali di Medicina* for April, Dr. Parona narrates a case of cervical spina bifida which he successfully treated by Prof. Rizzoli's method of applying a constrictive forceps at the base of the tumour. It makes the fourth successful case recorded. Dr. Parona gives full particulars of the other three cases.

We much regret to announce the death of Professor Rainy, M.D., LL.D., of Glasgow, at the advanced age of eighty-three. In 1842 the deceased was appointed to the Chair of Forensic Medicine in the University of Glasgow, which he occupied up to the time of his death. He practised his profession as consulting physician with signal success.

Iodide of Starch.—Bellini suggests the employment of the Iodide of Starch as a medicinal agent. He states that it forms with some poisons, as with strychnia, insoluble compounds; and with others, as with alkalies and alkaline sulphurets, it forms compounds which, though soluble, are not deleterious.—*Edinburgh Medical Journal*, August, 1876, from "*L'Imparziale.*"

The resistless tide of time has swept away another ancient landmark in the history of medical science in the person of Christian Gottfried Ehrenberg, Senior Professor in the University of Berlin, who died in that city on the 27th of June, aged 81. He collected the materials for his great work on the "Infusoria" during his travels with Von Humboldt and Rose.

The California millionaire, Mr. James Lick, demanded a bill of particulars of the physician who sued him for services amounting to $55,000, and got one specifying three thousand and eleven visits, extending over a period of twenty-one years and eleven months. The judge thought this was enough, evidently, for he denied a motion for a further bill.—*Phil. Med. and Surg. Reporter.*

Premature Mental Decay.—Dr. Routh, in his recent work, gives an interesting interview with Dr. Golding Bird, six weeks before the death of that gentleman, in which he spoke of his full waiting-room and large professional income as being no matter for congratulation, seeing that he (Dr. B.) felt himself a wreck at a little over forty. "My parting words of advice to you," said Dr. B., "are, never mind at what loss, take your six weeks' holiday."—*New York Medical Record.*

Sir William Fergusson.—We are very glad to be able to state that Sir William Fergusson is continuing to improve in health, and that he is enjoying the late beautiful weather at his country seat in Scotland. There is, probably, no one more deservedly popular with the profession than Sir William Fergusson, and it will sincerely rejoice if he regains his health so as to return to those labours in which his admirable dexterity and judgment have so long enabled him to give effect to his benevolent objects.—*Lancet.*

Cachets de Pain—Medicated Wafers.—A popular method of smuggling bitter powders into the stomach is by wafers, a modification of the "rice paper" plan. The powder is snugly ensconced between an upper and an under crust, and the wafer thus prepared is dipped in water and swallowed like an oyster. Five or ten grains of quinia, or any other bitter powder, may be slipped into the stomach in this way without the knowledge of the gustatory nerves. We are indebted to Messrs. Painter & Calvert, druggists of this city, for some specimens made by them, about as large as the bowl of a teaspoon, and which serve the purpose admirably.

Urea—Its Relations to Work.—From an extended review of Dr. Pavy's investigations into the amount of nitrogenous excreta eliminated by Mr. Weston during two days of his extraordinary walking feats, the *British Medical Journal*, Mar. 17, 1876, concludes "that the amount of urea excreted corresponds to the general tissue change, and not to the amount of muscular exercise; and that we work at the expense of our non-nitrogeneous food, and not at the expense of our albuminous tissues."

Poisoned by a Hat.—A man having bought a felt hat at Stettin, after wearing it for two days found himself suffering from headache, which was followed by swelling of the forehead and the appearance of an eruption, which terminated in some small suppurating ulcers. His eyes became also inflamed and swollen, the rest of the face more or less participating in the inflammation. On submitting the hat to a juridical chemist it was found that its brown "sweat-leather" (an expressive, if not a very elegant designation) had been coloured with poisonous aniline dye. The matter was then put into the hands of the police.—*Deutsche Woch.*

Easy Method of Extracting a Broken Catheter from the Urethra.—Dr. Young was recently called to a patient, about eighty years of age, who was suffering from retention of of urine, caused by the breaking in the urethra of a No. 8 silver catheter, which he had been in the habit of using. The point of breakage was beyond the beginning of the curve, and it presented two sharp pointed spicula, three-eighths of an inch long. On external examination, the urethra was tender; the broken portion of the catheter lay about seven inches from the meatus, and was movable only in the direction of the bladder. Dr. Young took the eyes off a No. 11 catheter and passed it down to and over about an inch of the broken end, when, on making an angle with No. 11, No 8 became locked, and was easily withdrawn.—*New York Medical Record*, September 16th, from *British Medical Journal.*

Local Subcutaneous Injection of Carbolic Acid in Polyarthritic Rheumatism.—Such injections have been recommended by Kunze. A solution of 1:100 should first be used, which can be increased to 3 per cent. The solution employed by the author is one of 2 per cent. The effect is only one of local anæsthesia, which lasts five to six hours. These injections are also efficacious in neuralgia and sciatica; in lumbago they are more beneficial than in neuralgia.—*New York Medical Journal*, September, from *Lyon Medicale.*

Mr. A. Bergeron, *Comptes Rendus Acad. des Sci.*, October 26th, 1875, undertook some researches to show what occurs in veins denuded —or simply isolated—for the cure of varices, with the following results. "The isolation of the vein destroys the cellular envelope, in which are the vasa vasorum. First, the external tunic, and then the middle tunic sphacelate, and finally, the internal tunic and its endothelium; the blood, which up till this time had continued to circulate, as it found in its path a regular epithelium, smooth and absolutely normal, becomes coagulated on contact with the altered internal tunic, the necrosis of which renders it a foreign body.—*Brit. & For. Med. Chir. Rev.*, July, 1876.

Composition of the Human Body.—A complete analysis of man recently made by Dr. Lancaster, of London, has been described by him in a chemical lecture. The body operated upon weighed 158.4 lbs., and the lecturer exhibited on the platform 23.1 lbs., carbon, 2.2 lbs., lime, 22.3 ounces phosphorus, and about 1 ounce each of sodium, iron, potassium, magnesium and silicon. Dr. Lancaster apologized for not exhibiting 5,585 cubic feet of oxygen, weighing 121 lbs., 105,000 cubic feet of hydrogen, weighing 15.4 lbs., and 52 cubic feet of nitrogen likewise obtained from the body, on account of their great bulk. All of these elements combine into the following: 121 lbs. water, 16.5 lbs. gelatine, 52 lbs. fat, 8.8 lbs. fibrin and albumen, 7.7 lbs. phosphates of lime and other mineral substances. —*American Gaslight Journal.*

Recipe for Curing a Taste for Liquors.—At the festival of one of our reformatory institutions a gentleman is reported to have said: "I overcame the appetite by a recipe given to me by old Dr. Hatfield, one of those good old physicians who do not have a percentage from a neighbouring druggist. The prescription is simply an orange every morning half an hour before breakfast. 'Take that,' said the doctor, 'and you will want neither liquor or medicine.' I have done so regularly, and find that liquor has become repulsive. The taste of the orange is in the saliva of my tongue, and it would be as well to mix water and oil as rum with my taste." The recipe is simple, and has the recommendation that it can do no harm even if it does no good. —*Boston Journal of Chemistry.*

In the *Boston Medical and Surgical Journal*, July 27th, we find the following:—We have to record a death occurring during the administration of ether in the practice of Dr. A. D. Sinclair, of this city. The patient, a young schoolteacher, had suffered for some time from dysmenorrhœa, for which incisions of the os were advised. The operation was performed on Wednesday, July 19th, ether having been administered by Dr. Vogel. The patient was placed upon the left side with the left arm behind her, as in Sims's position for a vaginal examination. The first steps of the operation had scarcely been completed when, to use Dr. Sinclair's expression, the patient suddenly died; we shall hope to obtain a detailed account of the case at an early day. It is hardly necessary to add that the unjust suspicions of foul play which have been thrown around this case have not been borne out by the testimony thus far given at the inquest at the time of writing, and have had no weight in the minds of the professional brethren of Dr. Sinclair.

Use of Drainage Tubes in the Treatment of Amputation of the Breast.—Five cases of amputation of the breast for scirrhus cancer have been recorded in this hospital since June of 1875. Of these cases, four were of the right mamma, one of the left. In three cases, the tumour was removed and the wound brought together by wire sutures, and allowed to heal by first intention, small pledgets of lint being placed at the most dependant part to allow drainage. There was much sloughing, and in only one case did the wound unite by first intention. In the two remaining cases, after removal of the entire breast and tumour, every vessel ligated and all oozing ceasing, the surfaces were allowed to glaze, and a small elastic tube, perforated every half inch with eyelet holes, was laid along the floor of the wound, and the flaps drawn over the tubing were united by wire sutures.

Each day a current of carbolized water was passed through the tubing by the use of a syringe, and all decomposing matter removed. Pus was drained away freely. The flaps united at once by first intention, and as soon as all drainage ceased the tube was withdrawn. Each patient recovered within three weeks from date of operation. There is no comparison as to the good results of this plan over the other.

On Giant Cells.—Dr. Hermann Beigel, in a paper (Virchow's *Archiv*, April, 1876) on the pathology of cauliflower excrescences, directs attention to the almost universal part played in morbid anatomy by giant-cells. He quotes the observations of Johannes Müller on their appearance in cancers and enchondromata; of Kölliker, in the bones of the normal skeleton; of Wagner, in the arterial coats; of Rustizsky, in the re-absorption of callus; of Virchow, in the lymphatic glands, and in the omentum in tubercular peritonitis: of Paget, in marrow tumours; of Schuh, in epulis; of Groh and Lancereaux, in other tumours; of Langhans and Klebs. in tubercle, and in the early stages of elephantiasis by the latter; of Brodowski, in the granulations of chronic ulcers; and of Alexander Jacobson, in the healthy granulating wounds of soft parts. He thinks these researches prove that these cells cannot be considered as peculiar to any normal and pathological tissue, and that it may be said that under favourable conditions, any cell may degenerate into a giant-cell; and he believes these conditions are present wherever a more rapid development or degeneration of tissue, or both together, are present.—*London Med. Record.*

Professional Examinations.—The following were the questions on Surgical Anatomy and the Principles and Practice of Surgery submitted to the candidates at the pass examination for the diploma of membership of the Royal College of Surgeons on Friday and Saturday last, viz. :—1. Describe the boundaries of the popliteal space; and name the structures met with in its dissection, and their exact relations. 2. Mention the parts divided or exposed in the operation of ligature of the common iliac artery. 3. Give a brief account of such tumours as depend upon the formation of cysts; mentioning the chief varieties, and the modes of origin of such growths. 4. Mention the forms of polypus nasi; describe their structure and attachments, the symptoms to which they give rise, and the treatment. 5. Describe the conditions of the eyeball requiring its excision, and the method of performing the operation. 6. Give the treatment suitable to penetrating wounds of the elbow joint, and the possible results in an unfavourable case. Candidates were required to answer at least four, including one of the first two, out of the six questions. The following were the questions on the Principles and Practice of Medicine, viz :—1. Describe a case of acute pneumonia in the adult; giving the causes, symptoms, and physical signs of the different stages, and the sequelæ of the disease. 2. What are the various parasites found in the human body? Describe them, give their habitat, and the usual treatment. 3. Give the indications and counterindications for the employment of opium and its preparations. State the constitution and average dose of the following pharmacopœial preparations :—Acidum nitrohydrochloricum dilutum, confectio opii, decoctum aloes compositum, pilula conii composita, pilula hydrargyri subchloridi composita, pulvis kino compositus.

The Teachers of Physiology and the Cruelty to Animals Bill.—The teachers of physiology in England, Scotland, and Ireland have unitedly drawn up and signed a very important memorandum of facts and considerations relating to the above Bill, which ought to go some way towards dissipating the clouds of ignorance and prejudice by which the subject is surrounded. After tracing the origin of the existing agitation to the appearance of certain letters in the public journals, describing alleged cruelties in a physiological laboratory at Florence, to misconceptions connected with the publication of the "Handbook for the Physiological Laboratory," and Dr. Klein's evidence, the physiologists aver that after more than two years' agitation, supported by organised societies and ample funds, no abuse of the practice of experiment has been proved; and they repeat the statement most of them made before the Royal Commission, "that within their personal knowledge, the abuses in connection with scientific investigation, against which it is proposed to legislate, do not exist and never have existed in this country." After indicating the nature and purpose of scientific experiments on animals, the reasons why the exemption of cats and dogs for all such experiments (even when rendered absolutely insensible to pain) would be detrimental to the progress of discovery, in those very diseases, too, of which these animals are themselves often the subjects, and after pointing out that experiments for research should not be exclusively restricted to registered laboratories, the memorandum concludes by dwelling upon that one point on which it says scientific men and those who assume to be the vindicators of humanity are in complete agreement—viz,, the necessity of putting trust in trustworthy persons. The signatures of sixteen professors of physiological science are attached to the document, and include the names of Professors Sharpey, Dr. Wm. B. Carpenter, Professor Humphry, Rutherford, Burdon-Sanderson, Pavy, Foster, and the other teachers of physiology in the United Kingdom.

Examination of the Milk of Women during the Employment of Mercury in the Form of Ointment.—O. Kahler examined the milk of two syphilitic women who had been subjected to the inunction cure, and was unable to discover the faintest trace of mercury in them. The positive statements made in regard to animals he refers to errors in the mode of analysis, the mercury being derived from the battery itself. Even when the patient was mercurialised he was unable to discover any mercury in the urine. The improvement occurring in children, which he does not dispute, when syphilitic mothers are placed under the influence of mercury, he attributes to the improvement in the general condition of the mother and the consequent improved quality of the milk. (*Präger Vierteljahrschrift*, B. cxxvii. p. 39.)

The *Medical Examiner* says that an official inquiry into the results of gymnastic exercises has recently been instituted at a military gymnastic school in France. The results of the inquiry, which extended over a period of six months, established:—1. That the muscular force is increased, on the average, 15 to 17 per cent., and occasionally from 25 to 30 per cent., while the force has, as we might expect, a tendency to become equal on both sides of the body. 2. That the capacity of the chest is increased by one-sixth, at the lowest. 3. That the weight of the individual is increased from 6 to 7 per cent., and occasionally from 10 to 15 per cent., while the bulk of the body is diminished, thus showing that the profit is confined to the muscular system. The increase of muscular force was generally confined to the first three months of the course. During the last moiety a serious diminution usually occurred, and here the dynamometer gave positive indication of the necessity of moderating or suspending the exercises.

APPOINTMENTS.

George Boddington, of the village of Sparta, Esquire, M. D., to be an Associate Coroner, in and for the County of Elgin.

John Richard Reece, of the village of Huntsville, Esquire, M. D., to be an Associate Coroner, in and for the District of Muskoka.

Robert Wilson Forrest, of the village of Mount Albert, Esquire, M. D., to be an Associate Coroner, in and for the county of York.

Robert Wilson Forrest, of the village of Mount Albert, Esquire, M. D., to be an Associate Coroner, in and for the county of Ontario.

Births, Marriages, and Deaths.

MARRIAGES.

At Tilsonberg, on the 14th September, in St. John's Church, by the Rev. Mr. Wray, Incumbent, J. T. Moore, M.D.C.M., to Frances, eldest daughter of Dr. S. Joy, of the same place.

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Selections: Medicine.

CLINICAL LECTURE ON SPINAL HÆMORRHAGE.

BY EDWARD LONG FOX, M.D.,
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GENTLEMEN,—The patient you have just seen is a labourer, aged thirty-four, of temperate habits. He has always had good health until two months ago. He was then carrying a heavy weight on his back up a ladder, and felt suddenly a pain across the loins. His left hip immediately gave way under him; he was unable to lift the left foot from the ground. At the same time his urine began to dribble away from him, and on the next day the fæces passed unconsciously.

On admission, there was found considerable wasting of most of the muscles of the left leg. He could bend the left knee but not the left hip. He was able to stand with a little help, but manifestly depended chiefly on the right leg. His urine was passed unconsciously, and he had no power over the accelerator urinæ. There was entire paralysis of the sphincters of the anus. He had a bedsore as large as a crown-piece over the sacrum. His digestion was impaired. There was slight hyperæsthesia over the paralysed leg, and complete absence of galvanic excitability. No tenderness or pain down the spinal column. The temperature was a little raised, probably from the irritation of the bedsore. The temperature in the left groin one-fifth of a degree (Fahr.) higher than in the right. Urine ammoniacal and purulent.

He was given strychnia and quinine, the bedsore attended to, a nutritious diet ordered, and in a very short time he improved to the extent of being able, in bed, to move the leg very freely, to control completely the sphincter ani, and to use the accelerator urinæ, and, perhaps as an indirect result of doing so, the urine did not dribble away so incessantly. The bedsore got well, and the patient was able to digest a nutritious diet.

We have here—

1. Almost complete motor paralysis of the left leg, with slight hyperæsthesia, and with extinction of galvanic excitability.

2. Complete paralysis of the sphincter vesicæ and the accelerator urinæ and sphincter ani.

3. The occurrence of these paralytic symptoms *immediately* after the accident.

4. The gradual recovery from the motor paralysis of the left leg; complete restoration of the sphincters of the anus, and partial recovery after one month's treatment (three months after the injury) of the accelerator urinæ and sphincter vesicæ.

5. The sequence of cystitis, gradually alleviated by small astringent washings of the bladder.

The diagnosis is gathered from the mode of access on the one hand, and on the other from the consideration of the parts paralysed. The mode of access was absolutely sudden. A strain on carrying a heavy weight: a pain low in the back and along the few inches of the great sciatic nerve on its exit from the spinal canal; loss of power over the anus and bladder in the course of a few hours; the gradual occurrence of ammoniacal urine and ropy purulent mucus from the bladder, as a result of the inability of fully emptying this organ.

The consideration of the parts paralysed enables us to fix pretty accurately upon the seat of lesion. Thus, neither the upper extremities nor any of the muscles engaged in respiration are involved; the lesion, therefore, must be below the last dorsal vertebra. The first lumbar gives off the ilio-hypogastric and ilio-inguinal nerves; the second, the genito-crural and external cutaneous; the third, the anterior crural, dividing into the middle cutaneous, the internal cutaneous, and the long saphenous; the fourth, the obturator, supplying the adductor muscles. Now, not only was there in this case no paralysis of the cutaneous nerves, but, even whilst unable to use the leg in any other way, the patient retained the power of bringing it towards the middle line, showing that the obturator was unaffected. Part, however, of the fourth lumbar, with the fifth lumbar and the first four sacral nerves, unite to form the great sciatic, the small sciatic and the pudic nerves, supplying not only most of the muscles of the leg and foot, but also the accelerator urinæ; whilst a branch of the fourth sacral supplies the sphincter ani. This muscle is also supplied from the inferior hæmorrhoidal branch of the pudic nerve. The sphincter vesicæ is supplied mainly from the sacral plexus, derived chiefly from the four upper sacral nerves. Both the sphincter vesicæ, and the external and internal sphincter ani, the latter especially, derive some of their nervous supply from the hypogastric plexus of the sympathetic; and this plexus, again, is mingled with nerves from the fourth and fifth lumbar ganglia and the four upper sacral ganglia, with nerve connections with the fourth and fifth lumbar and the four upper sacral nerves. The seat of lesion is therefore tolerably plain. It is unilateral, confined to the left side, and situated not above the origin of the fourth lumbar nerve.

Such, then, being the mode of access, and such the position of the lesion, what is its nature? It cannot be spinal meningitis, for this lesion is not accompanied by paralysis; nor does the patient lie in any peculiar position, showing an instinctive dislike to being moved from fear of pain in the back and limbs that such movements would cause. It cannot be myelitis, though myelitis sometimes follows hæmorrhage, because the access was so sudden, the paralysis so one-sided; and there is no priapism. It cannot be congestion of cord, for, again, the mode of access is too sudden, and congestion only leads to very partial paralysis, and that of a paraplegic form.

I would say in all fairness that Professor Leyden throws doubt on the existence of spinal congestion as a lesion causing symptoms, from the difficulty in verifying it by post-mortem observation. Though doubtless congestion is difficult of proof, it is equally impossible to disprove; and the transient nature of the paralysis supposed to follow it, and its recovery under remedies known to influence the calibre of the vessels, such as ergot, belladonna, strychnia, etc., are reasons for accepting the real existence of this lesion.

The absence of tonic spasm, and the presence of paralysis, prevent any thoughts of tetanus. There is no tenderness down the spine; and this symptom is never absent in the so-called spinal irritation. Here again the paralysis is a diagnostic mark. The paralysis would be at once too sudden and too presistent to depend on pure shock. Under such circumstances the symptoms would scarcely be unilateral; and did they occur with such intensity from shock, whether they may mean spinal congestion, spinal anæmia, or some peculiar cell-change of a temporary nature, they could not well presist for several weeks, unless the shock had determined myelitis, meningo-myelitis or hemorrhage.

Locomotor ataxy differs from the lesion before us in that its progress is extremely gradual; it is accompanied with no true paralytic symptoms affecting either the limbs or the sphincters until a very long time has elapsed, if ever; and it is manifested by a want of co-ordination that is absent in our patient. The ocular phenomena, also, so frequently met with in locomotor ataxy, are wanting in the case before us.

The suddenness of the access of paralytic symptoms, with the marked improvement of the patient under treatment, entirely forbids the idea of tumour of the spinal cord. And lastly, the absence of reaction in the paralysed muscles to galvanic stimulus is sufficient proof that the lesion is spinal, and not cerebral.

We are therefore led to the almost certain diagnosis of slight hæmorrhage of the spinal pia mater on the left side of the cord, about the level of the origin of the fourth lumbar nerve, dripping *guttatim* downwards, and never of sufficient amount to pass round the cord to the right side.

Is the prognosis favourable or otherwise? To form a right opinion on this point, we have three main data—the position of the spinal cord affected; the nature of the lesion; and the effects of treatment so far as it has gone. We have, however, to keep in remembrance the effects of the lesion on particular organs, and on general nutrition, and also the secondary sequelæ on the spinal cord that are sometimes the consequences of hæmorrhage. The position of the lesion is so far satisfactory, that it is too far down to cause any interference with the respiration. As a general rule, the higher in the cord the lesion, the more disastrous it is. It is also a good point for prognosis, that the paralysis is unilateral as regards the limbs. This being so, makes it probable that some of the nerves supplying the bladder and the sphincters of the anus are also unaffected. The nature of the lesion—hæmorrhage, and that, too, to so limited an extent that it has evidently not affected the right side at all—is itself a satisfactory point. A small hæmorrhage ought, *primâ facie*, to be absorbed, and absorbed within a period that would render important sequelæ in the cord somewhat improbable. And then again, the effects even of very limited treatment enable one to speak, not with positive assurance, but with fair hope, of a good result. The state of the patient you have already heard and seen for yourselves; the sphincters of the anus have wholly recovered their power, and this was marked a few days ago, when accidently the patient was purged ten times after drinking too much tamarind-tea; the leg can be moved in every direction, and although locomotion is not easy, yet marked progress has been made. Again, the patient has regained considerable use of the accelerator urinæ, and some at least of the sphincter vesicæ.

On admission, however, we found a small bedsore over the sacrum, and you know how serious such a lesion frequently is, when the spinal cord is in any way affected. The bedsore is now nearly well, and this is another proof of the gradual clearing up of the internal lesion.

One thing still remains, and is enough of itself to impress a very serious aspect on the case, and materially to influence the prognosis—I mean, of course, the cystitis. The man passes a highly ammoniacal urine; and, on standing, this urine deposits a thick bed of epithelium, pus, and triple phosphate crystals. It may be that this cystitits has existed from a very early period of the illness—within, perhaps, a few days of the accident; if so, it has been probably increasing in intensity during the two months before he submitted himself to treatment. Not only is it a grave condition by itself, but, as you know, it may indirectly induce that degeneration of the kidney (beginning first in the pelvis, and progressing backwards into the renal structure) which we know by the name of surgical kidney. As long as the urine is so alkaline, we are quite unable by the microscope to determine whether or not the kidney is yet affected; our ignorance on this point at the present time, and our fear of such a renal affection in the future, must necessarily make our prognosis, otherwise favourable, extremely guarded.

And, lastly, the pressure of a clot of blood will sometimes produce myelitis; and although the seat of the hæmorrhage in this case is below the cord, we might get an equally disastrous effect by the pressure on the nerves of the cauda equina. I show you a plate of a section of cord in which destructive myelitis was set up after an accident, in which the bodies of three vertebræ were more or less fractured, and a large hæmorrhage into the spinal cord had resulted. Opposite the seat of hæmorrhage, and pressed upon by a clot, the cord was inflamed in almost its whole depth. Such a condition would be improbable in the case before us, all the more so that the patient is improving: but its possibility ought somewhat to affect our prognosis.

Now as to treatment. There are two principles to be kept in view in the treatment of such a case—first, to place the patient in the best pos-

sible circumstances for the absorption of the hæmorrhage; and, secondly, to remedy the effects of the lesion. To obtain the first result, you have seen that we have simply endeavoured to keep the patient in tolerable health. Slight tonics and strychnia, good food, care against constipation, gentle exercise of the affected leg, turpentine dressing to the bedsore, and a water-cushion to lie on, have been the main details of our care of him. But in attempting to remedy the effects of the lesion on the bladder it has been necessary to do more; and here I have urged attention to the minute details insisted upon so wisely by Sir Henry Thompson. It is expedient to insure the passage outwards of the muco-purulent *débris* with which the membrane of the bladder is covered, and also to effect the complete emptying of this organ. For this purpose the bladder is every second day washed out under certain special conditions—(1) that not more than one ounce of fluid be used; (2) that the washing is done with the help of a non-metallic catheter—you have seen that the accidental substitution of a metallic instrument on one occasion caused vesical hæmorrhage and considerable irritation; (3) that when astringents are used (and we did use them here after three or four injections of tepid water) they should be of the mildest character. Our patient has had acetate of lead lotion in the proportion of a quarter of a grain to the ounce of water, gradually increased to a grain and a half. He is also taking now an infusion of the *Triticum repens*. Under this treatment he feels no pain from distension of the bladder, nor from the nature of the application used.

He is getting well—slowly, indeed, as to the cystitis, rapidly in all other ways; and it is probable that had he come under treatment as soon as he received the injury he would by this time have entirely recovered.

LINIMENT TO REPRESS THE SECRETION OF MILK.—This liniment is made of six parts each of the tinctures of black pepper and of bergamot, and two and a half parts of camphor with eighteen of castor oil. The breasts are rubbed with it three times a day.—*Union Médicale.*

REMARKS ON APOPLEXY.

In a lecture on Cerebral Hemorrhage, in the *British Medical Journal*, Dr. Julius Althaus remarks:—

Among the various points which influence the issue of such attacks as just described, the *age* of the patient is a most important one. Clinical experience has shown that the young recover more easily from the complaint than the old; and the result of my researches on the mortality from this disease in England and Wales during the last forty years, enable us to give considerable precision to this point. A large number of infants die of apoplexy in the first year of age; but these are mostly cases of meningeal, and not of cerebral hemorrhage. Of the latter there are hardly any instances between the first and fifteenth year of life; after fifteen they are "few and far between;" but at thirty-five there is a perceptible increase, and the numbers then gradually swell, until they reach an immense maximum, between seventy and seventy-five years of age. Between seventy-five and eighty the mortality from this complaint is still very large, while after eighty a rapid fall sets in; but considering how few people are still alive at eighty and the subsequent periods of life, the fatality of cerebral hemorrhage does actually increase rather than diminish as age advances. I am therefore able to state in general terms that cerebral hemorrhage is of slight significance up to thirty years of age; that its fatality increases *pari passu* with years; and that *the greater the age, the less is the probability of recovery from cerebral hemorrhage.*

While, therefore, age must, in every individual case of this kind which may come under your observation, largely influence your opinion about the patient's prospects, you should know that *sex* has no such influence at all. It is true, that it has hitherto been generally assumed that males are more liable to die of apoplexy than females; but my investigations of this point have conclusively shown that such is not the case, that the sexes die in almost equal proportions of the disease; and that the slight excess which is found to exist is for women and not for men, the proportion in two hundred thou-

sand consecutive cases being 1000 for males, to 1009 for females. From this you will perceive that for the purpose of prognosis sex is devoid of practical importance.

The *constitutional condition* of the patient has, on the contrary, a most important bearing on prognosis. Where cerebral hemorrhage occurs from leukæmia or contracted granular kidney, the prognosis is unfavourable. Gout and syphilis are likewise undesirable complications, while the absence of constitutional faults will, *cæteris paribus*, render the patient's prospects more hopeful.

Finally, *treatment* may incline the balance towards recovery or death. The treatment by venesection, which was formerly much in favour, was thoroughly irrational, and generally followed by disastrous results; indeed, many patients have died of the remedy rather than of the disease. Venesection has lately fallen into disuse; but the condition of the brain during cerebral hemorrhage is not one of congestion, as was formerly believed, but of anæmia; the organ not only loses blood largely, but is also, from compression of its arterioles through the clot, unable to receive a fresh supply of the reviving fluid; death in this disease takes place chiefly from anæmia; and by resorting to phlebotomy, you simply increase cerebral anæmia still further, and thereby hasten the fatal result. *Eschew the lancet, therefore, as a deadly instrument in these cases.*

A simply expectant plan of treatment is recommended by the most recent writers on the disease; and there can be no doubt that abstaining from all active interference is far better than to bleed your patient. Molière, on his death-bed, cried out to his doctors: "Laissez-moi mourir, mais ne me tuez pas!" and the expectant plan of treatment certainly does not kill the patient, it only allows him to die. In spite, however, of recent authorities for doing nothing, a more active mode of treating cerebral hemorrhage seems to me to be called for.

Your object must be to arrest the further effusion of blood from the ruptured coats of the miliary aneurisms, by causing the vessels to contract. Now, many styptics must be inapplicable for these cases, because the patient cannot swallow, and even if medicines were introduced into his stomach, it seems most doubtful whether they would be absorbed. Nor can the rectum be used for the purpose of affecting the circulation, as there is frequently paralysis of the sphincter-ani, and inability of the bowel to retain its contents. The hypodermic mode of adminstering medicine seems, therefore, to recommend itself, particularly in these cases; and the remedy I think most appropriate for them is ergotine.

There are two kinds of ergotine known to chemists, viz., Wiggers' and Bonjean's. The former is insoluble in water, ether, and dilute acids, but soluble in alcohol, strong acetic acid, and caustic potash; and, on account of these peculiarities, it is not suitable for subcutaneous injection. Bonjean's ergotine, on the other hand, is easily soluble in water, and it is this therefore which you should use. I am in the habit of injecting a grain of it every hour, or where the symptoms are very urgent, even every half hour, into the subcutaneous cellular tissue; and, although the experience of a single observer, in a disease like the one now under consideration, cannot count for much, yet I feel justified in recommending you to follow this practice, as being likely to save many lives.—*Med. and Surg. Reporter.*

Methods of Increasing or Diminishing Intra-Thoracic Pressure at Will without any Pressure.—Dr. J. S. Cohen, (*Med. and Surg. Reporter*, July 26, 1876) gives the following method of obtaining the advantages of rarefied or condensed air:

1. Valsalva's method, a forcible movement of expiration with mouth and nostrils closed, increases the intra-thoracic pressure and has the same physical effect as the inspiration of compressed air, and the effect can be increased by external compression of the chest and abdomen.

2. Deep and prolonged inspirations with mouth and nose closed will expand the chest and rarefy the air in the lungs, and the effect is the same as that of the inspiration of rarefied air.

3. Expiration aided by external compression of the chest and abdomen has an effect similiar to that of expiration into rarefied air.

TREATMENT OF SCIATICA BY AQUA-PUNCTURE.

BY GOPAUL CHUNDER ROY, M.D.

The treatment of the following case was was undertaken in accordance with the suggestion made in *The Lancet* of the 4th March, 1876, by Mr. R. Clement Lucas. Just at the time I had this patient under my treatment, and seeing the miserable life he was leading from a chronic and obstinate attack of sciatica, I resolved to give him the benefit of this novel method. He was suffering from pain for a year and a-half, extending from the sacrum down to the left foot. The tenderness was felt along the course of the sciatic nerve on the posterior aspect of the thigh, and diffused itself on the calf. There was no starting of the limbs nor pain in the hip-joint; but on account of the rigid tension felt in stretching the limb he was obliged to walk in a stooping posture, so that the pelvis was distorted and rotated on itself, the spinous process of the diseased side being on a lower level than the other. His appearance indicated constant suffering, and the disturbance of nightly rest made his life a burden. There was no history of syphilis, and his general health was fair.

As no internal medicine or external embrocation produced any palliation of the symptoms, commenced hypodermic injection of water on June 15th. I must premise that the treatment was not an unmixed one, inasmuch as it partly consisted of acupuncture along the course of the nerve on the posterior region of the thigh. On the first day three injections were used —one in the gluteal region, one in the thigh, and the third in the calf of the leg. In the first two the needle was carried deep into the tissues, and a syringeful of water was injected; and in the third, as the pain was superficially situated, the injection was simply hypodermic. That the needle had passed close to the nerve in the thigh, was evident from the contraction of the muscles of the limb as the injection was being pumped in. I sent the patient away with instructions to appear on the third day, when he reported the pain in the leg had completely disappeared, and the limb was more at ease. The same treatment was repeated three or four times at intervals, after which he had so far recovered as to be able almost to walk upright. He had better rest at night that he had enjoyed for a year, and felt himself grateful for the palliation of his symptoms. Before injecting the water, I used to exhaust the cavity of the syringe with a view to ascertain if any fluid could be sucked in, but I never found anything except a few drops of blood. The relief could not have been due, therefore, to any letting out of fluid from the sheath of the nerve, to which the advocates of acupuncture in sciatica ascribe the benefit. The patient is still under treatment, and confesses that the injection has relieved more than half of his painful symptoms.— *The Lancet.*

RENAL NEURALGIA IN LOCOMOTOR ATAXY.

To the catalogue of visceral neuralgias in association with locomotor ataxy, with which readers of M. Charcot's admirable lectures are well acquainted, must be added yet one more—namely, a renal neuralgia. The case in which this was the predominant symptom was related by M. Reynaud at the last meeting of the Académie Médecine. A man, thirty-nine years of age, was admitted into the hospital suffering apparently from a severe attack of renal colic. There was extreme lumbar pain, marked retraction of the testicle, vesical tenesmus, suppression of urine, vomiting, and a condition of semi-coma. The diagnosis of renal colic, at first entertained, was subsequently abandoned, chiefly on the ground of the long duration of the attacks—namely, several days at a time,—followed by a temporary cessation and recurrence, finally becoming continuous. Moreover, the pain was radiated towards the shoulder as well as towards the thigh, and the urine was free from albumen. At the post-mortem examination, the kidneys were found to be healthy, and the cause of the renal trouble was found to lie in sclerosis of the posterior columns of the cord. The patient had never had any inco-ordination of movements. M. Reynaud thinks there can be no doubt that this was a case quiet analagous to those in which the stomach and intestines are usually the seat of neuralgia; and as he believes this to be the first instance in which nephralgia was marked, he contented himself with simply recording the facts of the case.

Surgery.

CLINICAL LECTURE ON THE TREATMENT OF COMPOUND DEPRESSED FRACTURES OF THE SKULL.

BY SAMPSON GAMGEE, F.R.S.

Surgeon to Queen's Hospital, Birmingham.

GENTLEMEN: Is the trephine to be employed or not in compound fractures of the skull, with depression? No question more than this has engaged the attention of practical surgeons: it is still unsettled, and I shall endeavour to lead you to a correct understanding of its merits in commenting on three cases which I have to bring before you. In each case the scalp was divided, and the bones of the skull were broken and driven in, without however, producing evidences of injury to the nervous centres. In none of the cases was the trephine employed; in all the result has been perfectly successful.

The man before you, Thomas Moran, a bricklayer's labourer, aged 55, was admitted to Ward 3 on September 15th. While he was at work, just previously, a brick fell from a considerable height upon his head, making a Y-shaped scalp-wound about two inches and a-half in length, and situated rather above the middle of the left parietal bone. The flap of the wound being turned back, a Y-shaped fracture became visible, with its centre depressed to one-third of an inch; the sides of the fracture sloping evenly towards the central and most depressed point. The man seemed little affected by the accident, and had no idea of its serious nature. The edges of the wound, admitting of easy approximation, were brought together and dressed with dry lint: and for the first fortnight the patient was kept perfectly quiet in bed, on milk-diet, with an ice-bag on the head. No signs of constitutional disturbance appeared, and the man was discharged at the end of seven weeks, to use his own terms, "in as good health as ever he was in his life." The wound was then quite healed, and the area of the depressed bone measured one inch and a-half longitudinally, seven-eighths of an inch transversely; its depth was three-eighths of an inch in the centre.

The next patient, Henry Hadden, a machinist, aged 25, was admitted into the Queen's Hospital at 11.20 P.M., on September 25th. A few minutes previously, in a street row, a brick had been thrown at his head, producing a wound an inch in length, over the left temporal ridge, in a line above and in front of the ear. The hæmorrhage was considerable. The probe passed into a very abruptly punctured fracture of the skull; the amount of depression being half an inch, and the edges on one side, at least, being quite perpendicular. Mr. C. W. Keetley, our house-surgeon, to whom I am indebted for the notes of these cases, made a memorandum at the time, to the effect that, in Hadden's fracture, a small piece of bone appeared to have been driven right in. The man was quite sensible, though faint from loss of blood. He was put to bed, with an ice-bag on the head. At 8.30 next morning, a little headache was complained of: the pupils were even; temperature 101 deg. A magistrate took the depositions at the bedside in the afternoon.

September 27th, morning. Pulse 80; temperature 98 deg. There was a thin drab fur on the dorsum of the tongue. The bowels were not open. He had slept well; was very hungry. The wound was healthy. His eyes were slightly swollen.

The bowels acted the next day. The wound gradually healed; and on October 9th, the ice-bag was left off, a flannel cap allowed to be worn, and the man to get up. At the end of another fortnight the man was discharged in perfect health; the cicatrix was quite sound; and the depression at the seat of fracture admitted the end of the little finger, which did not seem to touch bone at the bottom.

The third case which I have to bring before you is that of T. Smith, a joiner's labourer, aged 25. He was stooping down at his work, when a brick fell on his head from a height of thirty feet. When admitted to Ward 1 (4.15 P. M., October 15th, 1875), half an hour after the accident, he was quite sensible. A wound on the left side of the head was bleeding freely; corresponding to it was a depressed fracture of the skull, the depressed piece of bone being horse-shoe shaped, and situated near the middle of the lambdoidal suture. The depressed surface was about one-eighth of an inch below the surrounding bony level. No head-symptoms. Pulse 80; temperature 99 deg.; respirations 24. The edges of the wound were approximated and dressed with dry lint. An ice-bag was ordered to be kept on the head constantly.

October 16th. Temperature 99 deg.; pulse 72 respirations 20. He was perfectly sensible. He had taken plenty of milk. He was ordered to have an ounce of castor oil.

17th. He slept four or five hours in the night. The bowels had acted. Temperature 101 deg.; pulse 104; respirations 22.

18th. Temperature 101.6 deg.; pulse 76.; respirations 24.

November 19th, morning. Temperature 99.2 deg.; pulse 84; respirations 22. There were still

no symptoms of serious lesion or constitutional disturbance.—7 P.M. Temperature 104.4 deg.; pulse 104; respirations 32. He had a rigor half an hour ago. A full dose of castor oil was administered, and the bowels freely relieved. No other untoward symptom occurred, and the rigor and rapid rise of temperature remained an inexplicable incident.

December 8th. He had continued perfectly well, and for the last month had acted as assistant porter in the hospital. He was now discharged, and I made the following note: "The length of the cicatrix is one inch and three-quarters. The depressed portion of bone measures one inch and one-eighth, by seven-eighths of an inch. The depression is deepest in the centre, where no bone can be felt. the man looks perfectly well, and says that he is so."

You have here three cases of compound depressed fracture of the skull admitted within a period of one month, treated successfully, without the trephine or elevator. You may form some idea of the interest attaching to these cases, by a statement of Erichsen, that, with a single exception, he does "not recollect ever having seen a case recover, in which a compound depressed fracture of the skull occurring in the adult had been left without operation."

Prescott Hewett's counsel is given in no doubtful terms. "What," he asks, "is to be done, supposing there be a wound leading down to the bone in a depressed fracture of the vault without symptoms? The rule is that we are to operate and at once." With the utmost regard for this dictum of one of the most thoughtful surgeons of our time, who has made injuries of the head the special object of his clinical studies, and conceding that, in his advocacy of operative interference in compound depressed fractures of the skull, Prescott Hewett is at one with many eminent surgeons, especially British, I am clearly of opinion that the practice followed in the cases before you should be the rule of practice.

When addressing you on the treatment of compound fractures of the limbs, I have sought to impress upon you the wisdom of the precept, "to aim at reducing a compound to the condition of a simple fracture, and to treat both alike." This precept is equally applicable to compound depressed fractures of the skull, when the brain is not injured.

Although unanimity has not yet been attained, the progress of surgery has powerfully contributed to the establishment of this proposition. A century ago, operative interference was the rule in all fractures of the skull. It was Quesnay, himself an advocate of the practice of interference, who gave force to the opinions of dissentients, by the very title of one of those masterpieces of clinical study embodied in the memoirs of the old Academy of Surgery. It fell to the lot of another of the academicians to substitute for traditional empiricism rules of practice as prudent and safe in their application, as their conception was enlightened and their demonstration closely and carefully reasoned. With few reservations, Desault was opposed to the use of the trephine in fractures of the skull. It was otherwise with his great rival on this side of the Channel, Percival Pott. The elevator and trephine were his favourite instruments, and so great was his ascendancy in the surgical world, so much more fascinating for the multitude, then as now, were boldness and complication than prudence and simplicity, that his heroic action had many imitators; foremost amongst whom was his most illustrious pupil, John Hunter, who went so far as to advocate the trepan in some doubtful cases, "as the operation can do no harm." The impending French Revolution, and its attendant slaughter on the battle-fields of Europe was soon to furnish those lessons which, in surgical as in other experience, make men judicious.

When after the battle of Talavera de la Reyna, the order was given for all the wounded who could leave the town to march, Surgeon Rose found himself in charge of a large number of the disabled Guardsmen. Twelve or fourteen of them had compound fractures of the skull, some with depression. In none of these was the trephine employed. The retreat in the burning sun lasted sixteen days, and yet every one of those who were wounded in the head recovered.

Hennen relates the case of Corporal Corkeyne, wounded by a musket-ball in the head at Waterloo. The fractured portion of bone was driven into the brain (being exactly an inch and one-fourth from the surface of the scalp). No operation was performed, and yet the man was discharged cured in a few weeks. After quoting a similar case, Hennen sums up: "We have here sufficient proof that there is no absolute necessity for trepanning, merely for depressed bones from gun-shot"—an opinion strengthened by the cumulative experience of military surgeons, many of whom now entirely discard the trephine, while almost all are agreed that its use should be restricted to very exceptional cases.

Desault's conservatism told directly on the civil practice, not merely of his own countrymen but of British surgeons. John Bell, with his true surgical instinct, with his impetuous energy, and with the furbished eloquence of his ripe culture, threw in

his lot against the trepan. "After the expiration of my apprenticeship at these hospitals," Astley Cooper has placed on record, "I went over to Paris, to see the practice of Desault at the Hotel Dieu; and there I found that scarcely ever under any circumstances did he trephine; and he was more successful than the English surgeons." Abernethy and Lawrence, too, were in this matter disciples of Desault, and on the same side must be mentioned one of the most enterprising surgeons of the century—a master who combined in a very rare degree fearlessness and judgment, power of brain, and skill of hands—I allude to Robert Liston. In his *Practical Surgery* he thus writes: "When fracture of the skull is complicated with wound of the scalp, the surgeon will not in general mend matters much by trephining, as has been advised, merely because there is a wound; if the depression is pretty extensive, and unless he has a better reason to give for the proceeding than the mere circumstance of the fracture being compound, as it is called, he will often thus add as much to the injury and to the risk which the patient is subjected to by it, as he would by dividing the scalp in simple fractures."

This warning is of special significance, emanating as it does from one who had had abundant opportunities of witnessing the effects of the trephine and elevator, and who possessed operative skill and courage in so high a degree that he never felt the temptation to inaction as a refuge from responsibility.

Samuel Cooper was equally conservative; but it is due to you to state that three of his contemporaries—Guthrie, Brodie, and Velpeau—in the very first rank of surgical authorities, rather inclined to the heroic practice of Pott than to the physiological watchfulness and the gentle medical measures of Desault. Italian surgery has gradually come round to non-interference as the rule of practice in fractures of the skull, while the German school has traditionally been opposed to the trephine. Neudorfer, writing after the Franco-German war, sums up directly against it. MacCormac reflects the experience of the French and German surgeons on the battle-field of Sedan, in the statement that, "as a general rule, the largest proportion of good results (in gunshot fractures of the skull) obtain amongst those cases where the amount of operative surgery has been at a minimum."

Jules Rochard has contributed an interesting summary of the international position of the question. Speaking of trephining, he says: "The spirit of reserve distinguishes French surgery. It holds a position between the practice of the Germans, who scarcely ever trephine, and that of the English and of the Americans, who, though resting on the same rules as ourselves, have much more frequently recourse to this operation. Leon le Fort has analyzed the trephine operations on the two sides of the Channel from 1855 to 1866. He has found one hundred and fifty-seven of them in England, and only four in France, in that period."

The authorities I have quoted will be sufficient to convince you that the masters of our science have treated this question as a very important and difficult one. From their differences you will learn caution and toleration in judging others, and the need of most careful inquiry, before you determine to use the trephine. The three patients whom I have brought before you with compound depressed fractures of the skull, successfully treated without the trephine or elevator, have not recovered by accident or in virtue of a curious coincidence. As many authorities are against me, I have deemed it my duty to compare my opinion with that of others, for your instruction. In examining the question from an historical point of view, I do not pretend to have exhausted it; but I do hope to have proved that the progress of opinion has on the whole, been in favour of non-interference, when the scalp is wounded and the skull broken and driven in; without, however, producing symptoms of brain-lesion. The lesson very impressively taught by a careful study of the subject is this: that whereas the trephine was almost indiscriminately employed before surgery attained to the position of a science, its use has steadily decreased as enlightened experience has accumulated. Many surgeons, from being advocates of the trephine, have gradually abandoned it; but, so far as my researches have extended, I cannot find an instance of conversion to the practice of trephining by a surgeon whose reason indisposed him to adopt it, or whose experience had once led him to relinquish it. That there may be cases of compound depressed fracture of the skull justifying operative interference I do not deny, and I myself had occasion to operate successfully on such cases in this theatre. Another opportunity may present itself for discussing these cases. For the present, I shall limit myself to again impressing upon you my conviction that, in compound depressed fractures of the skull without brain-symptoms, the proper course of practice is NOT TO TREPHINE.—*British Medical Journal.*

A SITE has been granted in the Duchy of Saxe-Coburg Gotha for the cremation and subsequent disposal of the dead, and an apparatus is about to be erected by the German Society at a cost of 15,000 marks.

CLINICAL LECTURE ON STRICTURE OF THE URETHRA.

Delivered at the Liverpool Royal Infirmary.

BY REGINALD HARRISON, F.R.C.S.,
Surgeon to the Infirmary.

* * * * * *

In undertaking to say anything about the treatment of stricture, I am conscious that the subject is a well-worn one. Still, with all our plans of treatment, we have not arrived at anything like uniformity of practice, and as this is only to be obtained by taking the sum of our respective experiences, I feel less hesitation in bringing under your notice some conclusions which my own experience, chiefly gathered in the wards of this hospital, has enabled me to arrive at. These considerations I hope to place before you during my course of clinical lectures this session. In using the term "stricture," I reserve it, as Sir Henry Thompson suggests in his eminently practical work on Disease of the Urinary Organs, for one kind of stricture—viz., organic strictures. "Spasm" and "inflammation" are conditions more or less transient, but do not constitute stricture in the acceptation of the term which is now generally adopted. The causes of stricture are various. Let me give a few illustrations. A patient has a venereal sore on his glans penis involving the meatus. When this heals a cicatrix is left. Cicatrices are more or less disposed to contract, and in this instance result in the narrowing of the urethral orifice. This condition was well illustrated by a case in No. 7 ward, where the same state of things was produced by an improperly performed operation for circumcision; a portion of the glans penis having been removed along with the prepuce. When the sore healed, the cicatrix contracted, and the patient presented himself here with a tight stricture of the meatus requiring division. Another cause of stricture amongst our sailor patients arises from injuries where the urethra becomes bruised or lacerated. A man falls from aloft across a spar or a rope, and ruptures his urethra. If the patient recovers from the immediate effects of the injury, it is with his urethra scarred. Here we have the worst variety of stricture—traumatic—a form of the disorder more obstinate to deal with than any other. In our enquiries as to the cause of stricture, we find that by far the larger proportion of our patients attribute their misfortune, directly or indirectly, to previous attacks of gonorrhœa. Those who do so *directly* are disposed to look upon the stricture as the natural consequence of their previous mishap. Those who do so *indirectly* usually have something to say about the treatment employed and its bearing upon the subsequent formation of a stricture. It is worth our while for a moment to analyse the statements made by this latter class with the view of ascertaining how far their allegations hold good. "I was almost cured of my gonorrhœa, only a very slight discharge remaining, which I thought would go away of itself," is the statement of the patient who is convicted of his own indiscretion in having allowed things to go on from bad to worse. Others, again, seek refuge in referring their misfortune to the improper advice they have received. "I was told that it was only a gleet, due to weakness, which would go away by iron, tonics, and cold baths." Here we have illustrations of gleet terminating in stricture.

Now it is well for you, once for all to understand that a gleet is not a disorder which is disposed to go away of itself; on the contrary, it requires careful and well considered treatment, and if it does not receive this—that is to say, if it is clumsily dealt with or not dealt with at all—it most probably ends in the formation of a stricture.

A gleet is to be regarded as indicative of the early formation of stricture. Nay, further, you will not do wrongly in regarding a gleet as a stage in the stricture-forming process when by your treatment you can promise your patient to restore his urethra to its normal condition; when a stricture is once allowed to become cicatricial in its character, you may palliate or adapt, but you can no more *restore* his urethra than you can by dissection or any other process remove a scar from his skin. You may moderate the inconveniences of a scar, but you cannot obliterate it. Let not, then, the curable stage of stricture pass by; at all events, let the onus of doing so rest with your patient and not with yourself.

Again, it is very common to hear patients attribute their strictures to the use of injections in the treatment of their gonorrhœas. A considerable amount of prejudice exists in the public mind in reference to the use of these applications. Patients not unfrequently say, when consulting you about a gonorrhœa. "Do not order me an injection, as I understand they often occasion stricture." Is there any truth in such an allegation? Assuredly not, presuming, of course, injections are judiciously prescribed and properly used.

Let me remind you that the cure of gonorrhœa by specifics is essentially one on the principle of injection. For how do the drugs that act specifically on the urethra effect their purpose? How do we explain the action of copaiba, oil of sandal-wood, creasote and certain terebinthinates, in the cure of gonorrhœa? Do not all these drugs exercise their therapeutic properties, by certain of their constituents, for the most part demonstrable, being conveyed by the urine to the situation of the disorder? What is this but a cure by injection or, to be etymologically correct, ejection? It is the urine of the patient that conveys the specific to the disease, just as the rose water in your injection does the sulphate of zinc, or other astringents.

It is the abuse of injecting that is open to animadversion. Injections in the treatment of gonorrhœa only do harm, when, by reason of their composition or strength, they act as *irritants* to the mucous membrane.

In the ordering of urethral injections there are two rules which should be regarded:—1. Do not strain the urethra by the *quantity* of injection used. 2. Do not pain the urethra by the *quality* of the injection. A teaspoonful of fluid *put* into the urethra frequently is better than a tablespoonful *forced* in three times a day. This is a point upon which I have long insisted. In prescribing injections you should feel your way, adding to the strength according to circumstances. Some persons, it is well known, are far more sensitive to the action of remedies than others; and this applies equally to the urethra—"The temper of the urethra varies as much as the temper of the mind."* An injection appropriate in strength to a first gonorrhœa is like the proverbial drop of rain on the duck's back in the case of the *habitué*. I remember ordering one of the latter an injection well known as "the four sulphates." It cured him effectually, and without pain. A friend, hearing of the success, borrowed the prescription, and, without proper advice, used it. The consequences were, an acute attack of cystitis and a subsequent stricture. Surely it is only to the foolhardiness of the sufferer that such an unfortunate result is to be attributed.

And I would here remark that I have seen a great deal of damage done and suffering occasioned by the use of some of the nostrum injections advertised throughout the country as "infallible cures" and "preventives." Many of them contain the ordinary astringents applicable to the urethra, but in a very potent form. I caution you therefore against sanctioning their use.

These observations have been made with the view of showing that it is only by their improper use that injections are open to the charge of occasioning stricture. If they are prescribed in accordance with the rules I have given, you will never have cause to regret their use.

[Mr. Harrison then proceeded to speak of the pathology of stricture, illustrating his remarks by cases which have recently been under treatment in the infirmary.]

* Brodie on Diseases of the Urinary Organs, p. 50.

The Treatment of Cancer.—An English journal states that in the University College Hospital, London, in cancer cases, the application of stramonium ointment was found to give great relief to pain. Mr. Henry Morris had good results in a severe case of epithelioma, involving nearly half the scalp, with "Fell's Paste" (chloride of zinc, flour, and liquor opii sedativus, sufficient to form a paste). The first application produced an eschar, which was cut through so that the remedy could be applied deeper, and applications having been made daily, or on alternate days, for about a month, the whole mass came away, leaving the bone exposed; finally, a thin sheet of this exfoliated, the wound healed, and the patient has remained well for several months since.

THE RADICAL CURE OF INGUINAL HERNIA.

BY CHARLES C. F. GAY, M.D.,

Attending Surgeon to the Buffalo General Hospital, Buffalo, N. Y.

John Bliss, aet. 38 years; entered Hospital some weeks since, for anal fistula, for which I operated, and now having nearly recovered, is willing to have operation for radical cure of hernia. He has had hernia, right side, since 1862, nearly fourteen years, and has worn a truss. The abdominal ring is large, and the intestine descends into the scrotum.

At my clinic to-day, May 13, 1876, I operated in the presence of the class, in the following manner:—

Chloroform was given; lifting a portion of scrotal integument upon my left fore-finger, it was carried up to the inferior pillar of the abdominal ring, through which the needle was passed and brought out through the integuments nearly or quite an inch above the superior pillar. The needle, which has an eye at its point, was now threaded with silver wire, and withdrawn through the pillar which it had transfixed, but not through the scrotal integument. The point of the needle, guided by the index finger, and still threaded with silver wire, was directed upward, beneath the border of the superior pillar, through the pillar and out through the integuments at the same point where the needle was threaded.

The needle used in introducing the wire is four inches in length, slightly curved at its point, with an eye at its point, and is fixed to a strong handle.

Having introduced the wire, it is twisted, when, by passing the finger up to the ring it was found sufficiently closed to prevent any further extrusion of intestine. The same needle was used in passing a four-stranded silken thread or ligature. This ligature was passed in the manner following: The fundus of the scrotum was carried before the index finger up to the ring; the needle was now passed through the scrotum, directed by the finger, beneath the border of the superior pillar through the canal, and out through the integument an inch and a half above the ring; the needle was now threaded with the silk ligature and withdrawn down through the canal and tunica vaginalis testis, and was of sufficient length to allow the ends to be tied together. The operation was then finished, having required not more than ten minutes in its performance.

Subsequent treatment consisted of opium and the local application of warm water fomentations.

May 20th.—The silk ligature was removed; it had excited considerable local inflammation, but did not cause pain enough to require the administration of more than a quarter of a grain of morphine every four to six hours. The scrotum was suspended.

May 27th.—The silver wire was untwisted, in order to see if the pillars of the ring would separate. For this purpose the finger was passed up to the ring, when it was ascertained to be closed, without assistance of the wire ligature. The wire, however, was again twisted, cut short, and allowed to disappear beneath the integuments, to remain there as an innocuous substance, or until it ulcerated its way out. This patient was under observation until the middle of July, when he left the Hospital to go to work. At this time there was no indication of hernial protrusion; as a precautionary measure, however, I advised him to wear a bandage or light truss for a time, although there did not seem to be the least necessity for any mechanical support.

REMARKS.—I understand full well the measure of skepticism evinced by surgeons of the efficacy of any operative means yet devised or to be devised for the radical cure of hernia. I must confess to having shared in this skepticism myself; still, I have an abiding and firm conviction that this very common physical disability will yet fall within the range of the resources of surgery, and that an operation will yet be devised that shall be recognized as radical, and included in the standard and classical operations of surgery.

At the recent meeting of the American Medical Association, held at Philadelphia, I listened to the reading of an interesting paper upon this subject by Dr. Dowell, of Galveston, Texas.

I was surprised to learn from him of so large a percentage of cures by his operation, which consisted, briefly stated, in passing, with a curved needle, pointed at both ends, sutures through the pillars of the ring in sufficient number to excite inflammation, and thereby close up the opening. He had operated successfully upon over seventy cases, and claims that his method answers for any form of hernia. I shall be very glad to learn that, after a still more extensive experience, the Doctor shall find that his operation possesses all the merit he now claims for it. I fail to see, however, in his method, any essential advantage over that of my own, unless it may consist in the larger number of sutures which he employs in coaptating the borders or overlapping the pillars of the ring.

My own operation for radical cure of hernia has been limited to direct and oblique inguinal herniæ. I should be quite well satisfied with success in operating for these forms of hernia, inasmuch as they are, more than other varieties of

hernia, amenable to surgical means, leaving femoral hernia in the hands of those who are more sanguine than myself of good results.

In the operation which I have described, I might, with propriety, have used a second or third silver ligature, but my object in using the ligature has been to hold together the borders of the ring only during such time and no longer, as would be required for effusion and deposit of plastic material from inflammatory action excited by the silk ligature.

I introduce the silver wire subcutaneously, and have allowed it to remain for an indefinite period of time. I think it just as well to remove it after it has fulfilled its mission; that is, after subsidence of inflammatory action, since the ring will then remain closed without any further aid from the ligature, still, no harm or inconvenience can come from its remaining *in situ*. In the case of a child on whom I operated a few years ago, the wire ulcerated its way out after several months.

I feel unwilling, with my present experience, to say how much or how little the operation is fraught with danger. The point of the needle must be, in great measure, guided by the end of the index finger, and the first steps of the operation must necessarily be conducted by the sense of touch rather than of sight. With care and deliberation in transfixing the pillars of the ring with the needle, there will be no injury inflicted either upon nerve, blood-vessel, spermatic cord, or intestine, therefore, the only supposable danger must arise from the local inflammatory action.

In reference to the propriety of the operation, it is unfortunate that, at present, authority seems to be against the efficacy of operative measures. I have too much respect for the opinions of those who are cited as authority on questions of surgery, to distrust the soundness of any decisions which they may make, still, I hope that evidence may yet be adduced of sufficient force to enable those who have expressed doubt as to any permanent result from operative interference, to reverse their judgment.

Should it transpire, in the course of time, that the plastic material which has been relied upon for closing the herinal outlet is absorbed, then the operation is of no avail: but if it be not absorbed, as I have abundant evidence to show that it will not be, then certainly the operation ought to be classed with the standard operations of surgery.

Maximilian Joseph Chelius, the celebrated German Surgeon, died at Heidelberg lately, aged 83.

THE TREATMENT OF SCROFULOUS OPHTHALMIA.

Mr. H. C. Lawrence gives, in the *Medical Press and Circular*, his own experience on this debated subject, as follows:—

The marked digestive derangement has benefitted from a mercurial purge, followed by a course of non-mercurial aperients until the evacuations become normal. Next a plain, nourishing and unstimulating diet, to which milk contributes largely, is beneficial. Meat should not be given too freely. Most of the patients are ill-nourished when scrofulous ophthalmia manifests itself; partly from poverty, partly from digestive imperfections; to feed these too generously virtually promotes starvation; the fuel becomes excessive for the combustion power of the invalid.

Cod-liver oil requires regulation in use. Instead of regarding it as a specific, my own experience has led me to consider it hurtful in some cases; the cases for its use and non-use may be differentiated thus, as Sir William Lawrence and Niemeyer have noted: First, the "torpid" constitutions who are clumsy and thick-set in build, and exhibit a tumid upper lip and enlarged nose, and have abundance of adipose tissue; by these cod oil is not required, and it may prove injurious to them; while, secondly, the "erethitic," with slender frame, lack of fat, and accelerated pulse and over-active nervous system, largely benefit from the use of cod-liver oil. These cases have procured for it the name of an anti-scrofulous remedy (Niemeyer).

The photophobia has been relieved at first by the use of bromide of potassium, and the relief maintained by the administration of quinine. Quinine employed after potassium bromide has appeared more efficacious than when used alone. Relapses of intolerance of light have yielded to similar treatment.

Fresh air, and plenty of it, is imperative. Cold shower-baths in summer, sponging with tepid sea-salt water in winter, have proved valuable auxiliaries.

For local treatment a green shade, made like the peak of a rifle cap, is preferable to one fitting close to the eyes, the latter being inju-

rious. Padding of the eye with cotton wool to prevent friction of the lids appears to me neither necessary nor advantageous, equally good if not better results having followed frequent poppy fomentation instead, allowing free exposure to air, with shade from light.

When the acute symptoms have subsided the utmost possible benefit has ensued upon the use of poppy fomentation used as a douche to the eye, at first warm, then tepid, ultimately cold. The spasm of the orbicularis oculi seems to be much lessened thereby.

Counter-irritation in the form of linimentum iodi painted behind the ear is preferable to blistering. Scrofulous constitutions resent blisters, secondary cutaneous eruptions and swelling of the neighbouring glands being apt to follow. Frequency of counter-irritation, however, short of producing breach of skin and glandular enlargement, seems not only indicated, but is found practicably to be very useful.

Nitrate of silver has proved itself injurious when applied to the conjunctiva in scrofulous ophthalmia, and solution of atropine less useful in allaying irritation temporarily than frequent anodyne fomentation. Atropine should be reserved to insure dilatation of the pupil when necessary.

Iron is preferable to quinine in marked anæmia, but I have not sufficient evidence to prove its regular efficacy over quinine in promoting repair and nutrition in ulceration of the cornea, as some authors assert, while quinine exerts a marked effect in lessening the photophobia scrofulosa.

Removal of an Enlarged Spleen.—Mr. Spencer Wells recently removed at the Samaritan Hospital a large spleen, which had been diagnosed as an ovarian tumour. On tapping it its nature became apparent, and nothing was left but to give the patient a chance for her life by its removal. It weighed eleven pounds. The vessels were all carefully secured, but the patient sank in a few hours. This is a very rare form of diagnostic error, and there must have been a very close resemblance to an ovarian tumour, for Marion Sims was present at the time, and these two masters of the subject are not likely to have been readily deceived.—[*London Letter in Phila. Med. Times.*]

STRANUGLATED HERNIA.

BY B. H. WASHINGTON, M.D., AUGUSTA, GEORGIA.

In looking over the medical journals, I noticed an article by Prof. Augustus F. Erich, of the Baltimore College of Physicians and Surgeons, proposing a new mode of taxis in strangulated hernia. His plan is, to take the body of the patient at an angle of 45°, so that the intestines will gravitate toward the chest, an ice bladder to the ring, and gentle taxis; and this after the ordinary plan had been tried unsuccessfully for some hours. The Professor added that he intended to try a bag of sand on the hernia in the next case he might meet with.

Prof. Erich says that five treatises on surgery which he consulted, including those of Gross and Erichsen, did not recommend placing the patient in the posture mentioned.

Some years since I recommended a plan far better: it is to apply a dry cup to the abdominal wall, say over the umbilicus; then let an assistant stand between the legs of the patient and lift the hips as high as he can; then the operator, drawing on the dry-cup, produces a vacuum and atmospheric pressure (far better than sand) being superadded to the weight of the intestines gravitating toward the chest, a reduction is easily effected in less than a minute.

The operation is almost painless, and really seems so to the patient, for the relief from the preceding pain is so great that he never says a word about any suffering from the operation.

The above plan has not attracted as much attention as its merits deserve, but if any one will try this painless, easy and quick plan, he will never try the tedious, painful, and sometimes dangerous taxis, recommended in the ordinary works on surgery. I abandoned the ordinary taxis more than twenty years ago, because the above plan was so much superior.

The Russian peasantry reduce hernia by dry-cupping on a grand scale; they take a small cooking-pot, and make the bottom as hot as they can without making the rim too hot, and then applying over the abdomen, cool the bottom with cold wet cloths, and thus suck up so a large portion of the intestines that they are

able to make traction enough on the intestine to draw it back again into the abdominal cavity, though the patient has not the hips elevated.

I respectfully beg leave to call attention again to the above plan, as one promising all that is needed, with but little trouble to the operator, and no suffering to the patient.—*N. Y. Med. Journal.*

TREATMENT OF BOILS AND CARBUNCLES.

Dr. Peter Eade, in an article in the *Brit. Med. Journ.*, maintains the following doctrines in regard to these affections :—

1. That boils and carbuncles are not mere inflammations and sloughings of cellular tissue, but specific diseases.

2. That they are parasitic, and, as such, endowed with a definite life and history.

3. That, in their early stages, they may be infallibly destroyed and aborted by destruction of their central stem or root; and that even after this stage has passed, they may generally be destroyed, and in all cases, at the very least, greatly modified, by the free application of carbolic acid.

4. That, to produce this result, the acid must be freely introduced into the central portion of the disease, and also into any other part where an opening exists or is formed artificially.

The essentials for the proper action of the carbolic acid, Dr. E conceives to be :—

1. The acid must be applied in *strong* solution (four or five parts of acid to one of glycerine is the strength I employ).

2. It must be brought into contact with the diseased tissue, for it appears to exert no influence on or through the unbroken skin. To this end, if sufficient opening do not exist when the case is first seen, a proper one must be fearlessly made in the very centre of the disease by some appropriate caustic, and, perhaps, the acid nitrate of mercury effects this better and with less discomfort that any other.

3. The acid solution must be occasionally reapplied to, and into, the hole thus formed, or those already existing, and I have found it a good plan to keep a piece of lint wet with a weaker solution constantly over the sore.

NEW OPERATION FOR THE OBLITERATION OF DEPRESSED CICATRICES AFTER GLANDULAR ABSCESSES, OR EXFOLIATION OF BONE.

Mr. William Adams, surgeon to the Great Northern Hospital, etc., recommends (*British Med. Journ.*, April 29) for the removal or obliteration of deeply depressed cicatrices, such as result from glandular abscesses of the neck or from disease of bone in any region, a new operation, which consists : 1. In subcutaneously dividing all the deep adhesions of the cicatrix by a tenotomy knife, introduced a little beyond the margin of the cicatrix, and carried down to its base : 2. In carefully and thoroughly everting the depressed cicatrix—turning it, as it were, inside out, so that the cicatrical tissue remains prominently raised ; 3. In passing two hare-lip pins, or finer needles, through the base, at right angles to each other, so as to maintain the cicatrix in its everted form for three days ; 4. In removing the needles on the third day, and allowing the cicatrical tissue—now something swollen, succulent, and infiltrated—gradually to fall down to the proper level of the surrounding skin.

He relates three cases in which he resorted to this operation, and gives illustrations of the cases before and after the operation, which show considerable improvement in the appearance of the patient.

"After the operation," he says, "the cicatricial tissue always loses its shiny, membranous, and vascular characters ; it becomes thickened, and of an opaque white colour. The thickening of the cicatricial tissue results from its succulent condition during the three days it remains elevated by the pins, and the inflammatory infiltration at its base.

"The permanency of the operation is placed beyond all doubt by the last two cases described —one nine and the other nearly three years since the operation ; and the completeness of the obliteration of the depression and the improvement of the cicatricial tissue, have surpassed my most sanguine expectations."

Dr. Simon, Professor of Systematic and Clinical Surgery in the University of Heidelberg, is dead.

CARBOLIZED BRAN IN COMPOUND FRACTURES.

BY LEWIS D. MASON, M.D., BROOKLYN, N. Y.

The advantages possessed by bran, properly mixed with carbolic acid, as a dressing in compound fractures, are these :—

1. The discharge is disinfected as it flows from the wound into the bran.

2 We have a dressing that is "germ proof," and one that notably limits suppuration.

3. We secure the anæsthetic properties of the acid.

The method of carbolizing the bran is very easy—simply by adding the crude carbolic acid slowly to the quantity of bran to be carbolized, stirring it at the same time. A little experience will decide how much of the acid a given quantity of the bran will require. An excess should be avoided. The bran will retain the properties of the acid for some time. I have now used it in two cases of compound fracture of tibia, and one of compound fracture of femur.

Cancer of the Lips in Auvergne.—At the recent Congress at Clermont-Ferrand, Dr. Fleury, of that place, read a paper on the great prevalence of cancer of the lips in Auvergne, the facts being derived from a statistical account running over more than thirty years. The lesion is especially met with among the mountaineers, much less frequently occurs among the inhabitants of the plain, and is very rare among workmen in the towns. Abuse of tobacco-smoking cannot be adduced as the cause, as the mountaineers do not smoke : while the workmen in the towns, who are almost exempt from the affection, are all smokers. On this account Dr. Fleury, in 1856, entered his protest against the conclusions of Prof. Bouisson's work, which attributed cancer of the lips to smoking, designating it *cancer des fumeurs*. He believes that it approaches in its etiology chimney-sweepers' cancer, the want of cleanliness of sweeps and the mountaineers being the common cause of epithelial cancer in both. He agrees with Prof. Bouisson as to the less frequency of this cancer in women, and its localisation in them in the lower lip. He believes that, with improved hygiene and a greater attention to personal cleanliness, this disease, which annually sacrifices so many victims, will greatly diminish in frequency if not disappear.—*Gaz. Hebd.*

Dr. W. S. Bowen, ophthalmic and aural surgeon to the Hartford Hospital (U. S.), records this month the occurrence in his practice of six cases of disease of the middle ear induced by the use of the nasal douche in treating naso pharyngeal catarrh. Many will remember that Prof. Roosa published some time since in the *Archives of Ophthalmology and Otology* a report detailing sixteen cases of the sort. Dr. H. L. Shaw has also given his experience of eighteen cases, in three of which the mischief was caused, not by the ordinary douche, but by the posterior nares syringe, and in one by the practice of snuffing salt-and-water from the hand through the nostrils. Dr. Bowen says there can be no doubt that in his own cases the disease was entirely due to the forcible entrance of fluid thrown by the douche to cleanse the nasal passages and pharynx. In five of the cases the pain and disturbance about the ear were observed immediately after the fluid was passed into the nostril, and in the remaining case the connexion was so close as to justify a positive opinion as to the cause of the serious suppurative inflammation that followed. The writer observes that the nasal douche is really a dangerous instrument, the use of which should be discarded, save in exceptional circumstances.

Spontaneous Generation.—The *Institute* (August 2nd) announces that the Académie des Sciences received at its meeting on July 31st (the French academicians take no holidays) two letters in absolute contradiction of each other, and both written on the same day (July 29th), one dated from London by Professor Bastian, the other from the Valais by Professor Tyndall. The former reiterates the affirmations made in a previous communication, that urine exposed to a temperature of 50° C. (122° Fahr.) undergoes spontaneous fermentation without the intervention of any ferment. In his letter Prof. Tyndall declares that Prof. Bastian's experiments are absolutely incorrect, he having in vain repeated them. He has never obtained any but negative results, and denies that Professor Bastian has any right to draw conclusions from them favourable to spontaneous generation.

Midwifery.

REPORT OF A CASE OF ABDOMINAL PREGNANCY TREATED BY GASTROTOMY.

Dr. T. G. Thomas read the history of an interesting case of extra-uterine pregnancy which had been treated by abdominal section. The diagnosis had been strongly inferred from the development of the case, which was characterized by nausea and vomiting, and later by deposition of pigment. The most important and reliable signs, however, were a solid body the shape of a fœtus floating in fluid in the abdomen, and at the same time an empty uterus. After aspirating a large amount of sero-pus, the solid body rested at the symphysis pubis. It was decided to perform gastrotomy, and, after etherizing the patient, an incision was made in the linea alba to the extent of five inches, and a child removed. Dr. Thomas said that he would have jeopardized the life of the patient, after cutting through the abdominal walls and reaching the peritonæum, if he had not been confident of the diagnosis. The peritonæum was thickened, and presented many of the characteristics of an ovarian cyst. If the mistake had been made of stripping it off the abdominal wall, the patient in all probability would have died. After extracting the child, no placenta was seen, but merely the attachment of the cord to the peritonæum. From the experience gained in a former case, no attempt was made to discover and remove the placenta. The wound was closed, and a drainage-tube inserted in the bottom of the incision. The child weighed seven pounds, and had died apparently from compression of the cord. The experience of the former case referred to by Dr. Thomas was a persistent and nearly fatal hæmorrhage following the attempt to remove the placenta by force. After the operation, the patient did well till the fourteenth day, when signs of septicæmia developed themselves. On examining the drainage-tube it was found to be closed up, and, on clearing it and removing the discharge, the patient improved. Shortly after, a decomposing mass presented at the wound, and on examination this was found to be the placenta. After the removal of the placenta, the patient made a good recovery.

Dr. Thomas said that two important points to be considered in the operation of gastrotomy for abdominal pregnancy were, first, not to remove the placenta, and second, to keep the abdominal wound open. He had had under his charge seven cases in all, and in six of these a positive diagnosis had been made previous to operation. Four of them recovered and three died. In regard to the subject of operating, no definite rule could be laid down. In some cases an operation would be a blunder.

Dr. Barnes agreed with Dr. Thomas that no definite law could be laid down in regard to operation. He coincided also with the opinion expressed as to not removing the placenta. This had struck him forcibly in a case which he saw with Dr. Ramsbotham, of London. He questioned, however, if it were wise always to leave an unclosed portion of the abdominal wall for the voidance of the placenta. He believed that in many cases the placenta would either be absorbed or undergo such change as to give no further annoyance after the operation. He had not been so happy as Dr. Thomas in making correct diagnoses in this class of cases. He called to mind distinctly two cases that he supposed were undoubtedly extrauterine pregnancies. They proved, however, to be ovarian tumours. In speaking on the subject, he wished to draw attention to another point, and that was, the inability to make a diagnosis of ovarian tumours from a microscopical examination of the ovarian fluid. He obtained some fluid from a suspected ovarian tumour, and had it examined by one of the most skilful experts on the subject in London. On his assurance, ovariotomy was performed, when the case proved to be ascites.

Dr. Drysdale, of Philadelphia, said that in an experience of twenty-three years he had examined fifteen hundred cases, and had not made a mistake. He felt he could speak with certainty. The peculiarities of the cell were, that it was of a granular character and unaffected by acetic acid. When the same test was applied to the pus and other cells, they swelled up and became decidedly changed.

Dr. Byford had an experience of twenty-five

cases, and in all of these the cell referred to by Dr. Drysdale was present.

Dr. Thomas said that Dr. Barnes touched upon an important subject in speaking of the treatment of the placenta. The matter resolved itself into the question whether the safer procedure was to keep the abdomen open for drainage or not. He was strongly convinced that the former was the better plan, for the reason that it was unsafe to wait for septicæmia to develop and if the abdomen were closed, it would involve the necessity of opening up the cavity, and an exceedingly important point was the danger of not finding the nidus of septicæmia. In future cases he felt that he would be warranted in prosecuting the same method as practised in the past. Of the cases in which he had made a correct diagnosis he did not take any special credit to himself, as he thought that they were by no means obscure or puzzling. In regard to the ovarian cell, he was of the opinion that, although Dr. Drysdale was able to make a correct diagnosis, other observers were not so skilful. He had asked the opinion of microscopists in New York, and they frankly told him that they were unable to diagnosticate ovarian tumours by examining the aspirated fluid. It was only fair to Dr. Drysdale to mention that, of all the specimens sent to him for examination, a correct opinion had been rendered in each case.—*N. Y. Medical Journal.*

Hydrochloric Acid in Syphilis.—In some therapeutical notes in the *Medical Press and Circular*, Mr. Griffiths remarks that Piroleau was the first to call attention to the antisyphilitic virtues of hydrochloric acid, and among other authorities who have written favourably of it as a remedy in syphilis are Zeller, Rust, and Pearson. Rust considers that abstinence is an essential element of success in this treatment; he found that it invariably failed when a full diet was allowed. The formula used in the Vienna hospital was a drachm of the acid to two pints of barley water daily. In gangerous ulceration of the genitals Van Swieten employed an application of the strong acid diluted with six parts of water with great success.

A CASE OF ABSENCE OR NON-DEVELOPMENT OF BOTH UTERUS AND OVARIES.

BY A. H. GOELET, M.D., NEW YORK.

The following case will, I think, prove of interest to the profession, presenting as it does congenital deficiencies which are rarely met with:

Miss B., aged nineteen years, consulted me on the 12th of February, 1876. She had never menstruated, and complained of constant severe headache, and of bleeding from the nose. The headache she has had as long as she can remember; the epistaxis, off and on, for the last five or six years, but not with any regularity. Otherwise her health is very good. Within the past three or four years she has consulted several physicians, who made unsuccessful efforts to bring on her "periods." Her mother has also tried the usual domestic remedies, but likewise without success.

Her history led me to suspect some congenital malformation, and I therefore advised an examination, to which she reluctantly consented. The points revealed were these:

1. The *pudenda* were entirely devoid of hair.

2. The *vagina* was a mere *cul-de-sac*, not more than two inches in length, and there was no evidence of a uterus at its extremity.

3. There was *no uterus* found after a thorough exploration of the pelvis. By conjoined manipulation—the index-finger of the one hand in the rectum and the other hand on the hypogastrium—the excavation of the pelvis could be explored with ease, the patient being very thin; and not even a rudimentary organ could be detected.

4. I next examined for the *mammæ*, and found them wholly undeveloped; and

5. She has never experienced any *aphrodisiac sensations*.

Now, judging from her history and what was revealed by the examination, there is not only absence of the uterus, but also absence of the ovaries, or they are in an undeveloped state. There being no effort at menstruation (the epistaxis signifying nothing, since it does not occur periodically), no venereal appetite, and no development of the mammæ and pudenda, this conclusion would seem to be warranted.

I ordered a prescription of bromide of potassium and hydrate of chloral for the headache, and this, as I afterward ascertained, afforded some little relief.

Such cases as the above are extremely rare, though cases of the absence of the uterus only are more frequently met with. A somewhat similar case was reported to the Royal Academy of Medicine in 1826 by Dr. Renauldin, which is the only case of the kind I have seen recorded. A woman died at the age of fifty-two years. She had never menstruated nor experienced any venereal passions, and the breasts were undeveloped. At the autopsy only a cervix uteri the size of a writing-quill was found, but there was no uterus proper, and the ovaries showed very little development.—*N. Y. Medical Journal.*

CASE OF EXCESSIVE PTYALISM DURING PREGNANCY.

Sir,—I am induced to send the following case for perusal by your numerous readers, in the hope of some treatment being suggested by which my patient may obtain relief.

Mrs.——, aged thirty-four, mother of three children, and now about six months advanced in her fourth pregnancy, has suffered (from the third week from conception) extreme distress from a continual flow of saliva, which pours down the corners of her mouth, so as quite to have excoriated them. The quantity which flows away is about three pints daily. During sleep it ceases, but begins again an hour or so after awaking. In the earlier months vomiting was added to her troubles, but this has now passed off, but she still suffers from nausea. After meals she complains of a sour taste in her mouth, but this merely lasts an hour or so. The character of the secretion is quite watery and tasteless, though occasionally it assumes a thicker condition, and has to be retched or expectorated up from the back of the throat. She has used astringent waters for the mouth, and as she has excessive dislike to taking medicines internally, I suggested that belladonna liniment (B.P.) should be rubbed into the submaxillary and parotid glands as well as the epigastrium until she was under its influence; but neither of these plans of treatment produced the slightest effect. Her appetite is fairly good.

In the pregnancy previous to this one she suffered in the same way from ptyalism; but it did not commence until after the third month, and only lasted a few weeks.

I am, Sir, yours &c.,

July 14th, 1876. INQUIRENS.

*** Ptyalism, when it occurs during pregnancy, usually comes on in the early months, and lasts for about three weeks. In severe cases no treatment seems to have any effect.—ED. *Lancet.*

THE CAUSES OF STERILITY.—The two axioms in which the author, Dr. O. Von Grünewald, of St. Petersburg, sums up the views to which his researches have led him are as follows: 1. Conception is only one link in the chain of phenomena which are involved in the propagation of the species, and its importance is relatively much less than that of many other vital processes which occur during pregnancy. 2. The woman's capability of maturing the impregnated ovum is the important element of her reproductive power, and it depends for its part on a certain amount of integrity in the tissues of which the uterus consists. We shall only make one comment on Dr. Von Grünewald's valuable paper—namely, that it gives but little encouragement to a mechanical treatment of the causes of sterility. It rather lends its support to the views of those gynæcologists who consider that general remedies which improve the tone of the whole system are as likely to be successful in affections of the uterus as in those of other organs.—*Med. Times and Gaz.*

THE SPIROPHORE.—Dr. Woillez, of Paris, has devised an apparatus for the treatment of asphyxia. It consists of a zinc cylinder in which the body of the patient is hermetically inclosed, the head alone projecting. A portion of the air in the cylinder is then exhausted, when the lungs immediately expand, and air is then pumped into the cylinder to cause expiration. The process is repeated at brief intervals.

Materia Medica.

ANALYSIS OF SIX NOSTRUMS SOLD AS AGUE-CURES.

BY O. L. CHURCHILL, PH. C.

Five of these articles were found to contain one or more of the cinchona alkaloids, (chiefly the cheaper alkaloid); the remaining one contained no alkaloid. None contained arsenic, strychnia, or mercury.

The quantitative determination of the alkaloids, from well known difficulties, is presented as only approximate. The following was the general plan of separation, modified in several particulars, as found necessary for each mixture. From a weighed portion of the mixture, the alcohol, if any, was evaporated; the residue diluted with acidified water and filtered (more than once if need be); the filtrate precipitated by a slight excess of caustic soda; in most cases, the precipitate dissolved in acidified water, the solution concentrated and dissolved with strong alcohol, the filtrate evaporated and the residue dissolved with water. Care was taken to avoid loss, by well washing the residues of extraneous matter, and not washing the precipitates of alkaloids at all or but slightly. Taking a final precipitate by caustic soda, the alkaloids were then approximately separated from each other by the use of ether as a solvent, potassium iodide to precipitate quinidia, potassium sodium tartrate to precipitate cinchonidia, &c.*

1. *Ayer's Ague-Cure.*—Each bottle contains six fluid-ounces of a dark red, syrupy liquid, with a very slight white sediment. Taste, very bitter and slightly peppery, with a slight taste and odour of wintergreen oil. An alcoholic extract, (tincture) of cinchona bark, with additional and amorphous cinchona alkaloids (chinoidin), heavily saccharine and slightly aromatized. It contains a resin which presented the physical properties and gave apparently the physiological effects of podophyllum resin, but it was not so far separated from cinchona constituents as to be positively determined. It has free and combined sulphuric acid, and the white sediment is calcium sulphate (from the calcium salts of the bark). In *one fluid-ounce*

Amorphous alkaloids (chinoidin),	3.2 grains.
Cinchonia,	3·0 "
Cinchonidia,	0·7 "
Quinia,	0·8 "
Quinidia,	1·0 "
Total,	8·7 "

The cost of a bottle will not exceed 35 cents—the price being at wholesale, 65 cents, and at retail, $1.

2. *Wilhoft's Antiperiodic Fever and Ague-Cure.*—The bottle contains four fluid-ounces of a thin, dark-red liquid, with the odour of cinchona bark, a very bitter and acid taste, and acid reaction. It consists essentially of an infusion of cinchona bark made with water containing aromatic sulphuric acid (like those of the U.S.P.), and probably with an addition of quinia sulphate. One fluid ounce contains 3·0 grains of quinia and 5.4 grains of free and combined sulphuric acid (1.5 grains free). Cost of a bottle, not over 25 cents; price, $9 per dozen, $1.50 per bottle.

3. *Christie's Ague Mixture.*—A bottle contains seven fluid-ounces of a very dark syrupy liquid, one-fourth filled with sediment, and having a very bitter and peppery taste and an odour of common molasses. The sediment was powdered capsicum and a little resinous matter. The solution consists of a tincture of cinchona bark (the alcohol being 30 per cent. by weight), with cinchonia sulphate, and common molasses. Cost, not over 25 cents per bottle; price, at wholesale, 62 cents; at retail, $1.

4. *Peterman's Michigan Ague-Cure.*—Each bottle contains five-fluid ounces of a red, syrupy liquid, with much resinous sediment, a very bitter taste, and odour of cinchona. Contains an alcoholic extract of the bark, with chinoidin as the chief medicinal agent, and with a little sulphuric acid and syrup. Cost, complete, not over 25 cents per bottle; price, at wholesale, 60 cents; at retail, $1.

5. *Jayne's Ague Mixture.*—In each bottle, seven and a half fluid-ounces of a mixture having an odor and taste of rhubarb, dandelion and common molasses. It contains quinia sul-

* Flückiger & Hambury's Pharmacographia, 327.

phate and traces of other cinchona alkaloids, but not enough to render the mixture very bitter. The alkaloids were, with some difficulty, separated by benzine in presence of alkali; other means having failed. Cost, about 35 cents; price, at wholesale, 60 cents; at retail, $1.

6. *Rhode's Fever and Ague-Cure, or Antidote to Malaria.*—In each bottle twelve fluid-ounces of a black, turbid liquid, having a sweet and astringent taste. On standing, the sediment filled one-third of the bottle. The sediment is charcoal. The solution contains a little tincture of chloride of iron, partly reduced to ferrous salt by sugar, which is present; also a trace of sulphuric acid (a trifle of ferrous sulphate may have been added). Nothing more. "Bottle to be well shaken," etc.; one tablespoonful three times a day. "Most people could take three times the amount without any uncomfortable feelings." "Persons who find it to bring on unwished-for actions, should place the contents of two or more bottles in an open dish in their sleeping apartments." Price, at retail, $1.

Treatment of Tetanus by Calabar Bean.—In the "Mirror" of the *London Lancet* (Nos. for Sept. 2nd, 9th, and 16th,) is reported the history of three cases of Tetanus, treated at St. George's Hospital, in the service of Dr. Dickenson and Mr. Pollock, "with the extract of Calabar Bean, either by internal administration or subcutaneous injection, or both combined." Two cases recovered. The Editor of the "Mirror" remarks: "That the result in these cases was due to the beneficial influence of the Calabar Bean, it would be useless to attempt to deny. Both patients were, to all appearance, rapidly getting worse, until the administration of the extract of Calabar Bean was begun; from that time they improved and soon completely recovered. In the third case, although extract of Calabar Bean was exhibited in large doses, and the system became distinctly affected by the drug, the patient unfortunately succumbed. The immediate cause of death was not evident, but it is worthy of note that the man seemed to breathe freely, and remained conscious up to the last." In this last case, between 2.15 p.m., and 6.15 a.m., $9\frac{3}{4}$ grains were hypodermically injected.

EUCALYPTUS GLOBULUS AS A CURE FOR AGUE.

BY JOHN CURNOW, M.D., LOND.,

Professor of Anatomy in King's College, Assistant-Physician to King's College Hospital.

Whilst there is an almost complete unanimity as to the advantageous effect of the cultivation of the eucalyptus tree in the removal of malarial fevers from marshy districts, foreign observers differ greatly in their estimate of the value of its preparations in the treatment of these diseases, and very few, if any, trials have as yet been made of them in this country. The experiments of Fichter at Basle, and of Hertz at Copenhagen, gave almost negative results; whilst those of Groos in Hungary were extremely favourable. Further investigations are required to clear up these discrepancies, which are doubtless due to the difference of the preparations made use of, and the varying doses in which the drug was exhibited, as well as to the length of time that the disease had existed, and perhaps also to the place of growth of the trees from which the preparations had been made. Hertz thinks that old cases will yield better results than new ones, but that recent ones are sometimes very speedily cured by this drug is sufficiently evident from the notes of the two cases which are appended. The cases came under my care whilst I undertook the temporary charge of the patients at the Seamen's Hospital for my friend Dr. Harry Leach. The results are the more important because when I prescribed the eucalyptus I was very sceptical as to its value; for, with the exception of the chinchona alkaloids and arsenic, I had always before observed a signal failure of the numerous alleged remedies for intermittents. Amongst these were the sulphites of magnesia and soda, salicin, sulphate of beberia, picrate of potash, &c., and they had all been administered most freely. Moreover, both patients were under observation for some days before the medicine was exhibited, in order that the severity of the cases might be properly estimated, and that no fallacy might arise from the spontaneous subsidence of the disease, as occasionally occurs from a change of residence. The preparation of eucalyptus that I used was the tincture made by Messrs. Savory and Moore, and, except an agreeable feeling of

warmth in the mouth and pharynx, no appreciable effects but the rapid cure of the fever were noticed.

I had hoped to have made a more extended trial of the drug before publishing these cases; but ague is so very seldom seen in London that it may be a considerable period before I have another opportunity, and wider and more exact experiences can be so readily obtained in districts where malarial affections are endemic that I have thought it better to record them at once.

Case 1.—S S.——, aged eighteen, a Norwegian, was admitted May 23rd, 1876. He had been suffering from intermittent fever for four or five weeks. The attacks were moderately severe and of a well-marked tertian type. An expectant plan of treatment was pursued until June 9th, and during this period the paroxysms recurred on alternate days with the utmost regularity. They began at 10 A.M., reached their acme between 1.30 and 3 P.M., and passed off about 6 P.M.; thus lasting about eight hours. The highest temperatures varied from 104·8° to 105·6°. On June 9th the tincture of the eucalyptus globulus was given in one-drachm doses three times daily. The next day, on which another attack was due, his temperature only rose to 100°, and on the 12th to 100·4°; and after this date no further paroxysm occurred during the remainder of his stay in the hospital. On physical examination, a systolic bruit was heard over the apex of the heart, but this was evidently of some standing, and had so far given rise to no symptoms. The splenic dulness was normal.

Case 2.—C. O——, aged forty, a Dane, was admitted on June 19th, 1876. The attack commenced on June 14th, and was of the ordinary tertian type. The paroxysms were very severe, and extended over nearly twelve hours on an average. On June 27th the temperature was carefully taken at short intervals by Mr. Lacy, the house-physician. At 10.30 A.M. it was normal, at 11.30 it had risen slightly, and soon after rigors set in; at 12.40 P.M. it was 101·6°, at 2.20 P.M. 105·6, at 2.40 P.M. it had reached its highest point, 106·4°, at 3 P.M. it had fallen to 105·4°, at 6 P.M. to 101·4°, at 9 P.M. to 100°, and at midnight it was still above normal at 99·2°. The fit on the 29th was quite as severe. On July 1st, just before the next attack was due, the expectant plan of treatment which had hitherto been pursued was given up, and the tincture of the eucalyptus exhibited in drachm doses three times a day. The next two paroxysms were much shortened in length, and the temperature did not rise quite so high. On the 5th the dose was increased to two drachms three times daily, and he had his last attack on the next day. He was kept under observation until July 15th, and continued taking the medicine up to that date. This patient's splenic dulness was increased in extent, and the edge could just be felt. He had suffered from an attack of ague nine years before.

QUININE IN SURGICAL AFFECTIONS.

M. Verneuil, the well-known surgeon of La Pitiè Hospital, lately delivered an interesting lecture on the utility of quinine in surgical affections. He referred to several cases in his wards in illustration of the efficacy of this most valuable remedy in all affections in which the element *pain* is one of the conspicuous symptoms. Thus, for instance, in two cases of cancer of the uterus, M. Verneuil succeeded in relieving the excruciating pain characteristic of the disease by the administration of the sulphate of quinine after having failed to afford the desired relief by the other means usually employed in such cases.

M. Verneuil then summed up by announcing that the sulphate of quinine would be found particularly useful in all cases of an ataxic or adynamic nature, in neuropathic affections, and in septicæmia. In ataxic cases the lecturer stated that it was not necessary that the symptoms should be of an intermittent character to justify the administration of the drug; and as for neuropathic affections, no remedy can compare with it in these cases. He has found it particularly useful after operations on the eye, and in septicæmia its efficacy is undeniable.

M. Verneuil explains its action thus in the latter affection: it diminishes the pus-forming process, and acts as a corrective of the septic elements generated at the seat of the lesion, whether caused by the surgeon's knife or by accident. Here the sulphate of quinine is doubly useful, not only on account of the above properties, but even when employed locally it acts as a powerful antiseptic.—*British Medical Journal.*

VIBURNUM PRUNIFOLIUM; ITS USES IN THE TREATMENT OF DISEASES OF WOMEN, AND TO PREVENT ABORTION.

Dr. E. W. Jenks, of Detroit, read a paper on the subject of *Viburnum prunifolium*, or black haw. The virtue attributed to it was that it prevented abortions, by some sedative or other action on the uterus. The drug had been extensively used in the South by Dr. Faris, of Mississippi, with marked success. Dr. Jenks had used it in a hundred cases of suspected abortion, and had found that it was an agent to be depended on. The reason of embodying his experience in a paper was because of ignorance on the subject of a large number of his fellow-practitioners. The method of administration was to give from half a drachm to a drachm of the fluid extract of the bark for a few days before and a few days after the menstrual epoch. The action seemed to be directly the reverse of that of ergot. He had used it also with benefit in menorrhagia coming on at the menopause, and had found it to be very serviceable in dysmenorrhœa where there was no mechanical cause of obstruction.

Dr. Jenks presented some specimens of the bark of the plant, and said that he had found that the bark of other species of viburnum, as well as that of wild-cherry, had been used by the druggist, either wilfully or through ignorance. Dr. Bates, of New York, said he had been in the habit for some time of using viburnum. His attention had first been directed to it by reading an account of its properties in an eclectic periodical. The class of cases in which he had used it was those in which the abortion had become habitual. He was convinced that it was an agent of decided importance. The fluid extract could be obtained in this city. He had used the resinoid manufactured by Keith & Co., in doses of from two to four grains. The resinoid seemed to be as efficacious as the fluid preparation. Dr. White, of Buffalo, said the members of the Society would in all probability act personally on the suggestions of Dr. Jenks' paper, and be able to report on their experience at the next meeting. In reply to a question from Dr. Mundé, Dr. Jenks said it took the place of opium in controlling uterine action, while at the same time it was an agreeable tonic. His use of the drug had been empirical, and he was not prepared to give its physiological action.—*N. Y. Med. Jour.*

BROMIDE OF POTASSIUM AS A CAUSTIC.

In a paper read at the recent meeting of the French Association for the advancement of Science, M. Peyrand, of Libourne, claims for bromide of potassium certain properties hitherto but slightly recognized—properties which will extend the already wide range of the therapeutical uses of this salt. He found that subcutaneous injection in rabbits of concentrated solutions of the salt led to sloughing of the skin, and from this he was led to try the value of what he considered to be the escharotic properties of bromide of potassium upon malignant and other growths, either by means of injections into the tumour or by the application of the powdered salt to a raw surface. The action of the salt is completely resisted by the tegument. His first clinical experiment on the subject took place in April, 1874, when, by means of daily applications of powdered bromide, he effected the removal within twenty-eight days of an epitheliomatous growth on the face. He has since had equally good results from this treatment of atonic ulcers of the legs, rapid cicatrisation following the separation of sloughs produced by the application. In such cases he uses either the powder or an ointment of one part in five, or a mixture (one in ten) of glycerine and the bromide. In many skin affections, as chronic eczema, pityriasis, and acne, in phagedæna, ulcerative stomatitis, and many other local inflammatory disorders, he has found it of use. As a local hæmostatic, a solution of one in fifty has served for epistaxis, and as a general hæmostatic its success in many cases of hæmoptysis and metrorhagia was very marked, where ergot, perchloride of iron, and rhatany had failed.

PHYSIOLOGICAL ACTION OF CONDURANGO.—Dr. T. Lauder Brunton has published in our excellent cotemporary, the *Journal of Anatomy and Physiology* (April, 1876), a number of experiments instituted by him to determine the physiological action of condurango. "The general result of all these experiments is that condurango is physiologically inert."

SANTONIN.

There is probably no anthelmintic so popular with general practitioners as santonin. It must however, be within the cognisance of many that somwhat small doses have produced convulsions of a somewhat grave character. A German contemporary lately reported a case in which poisonous effects were produced in a child two years old by the ingestion of so small a dose as a grain and a-half. Convulsions commenced in the face, and extended to the extremities, while the respiratory action was greatly impeded. Under warm baths, enemata, and artificial respiration, the patient recovered. The physician in charge of the case then instituted a series of experiments on the lower animals, and found that chloral and ether inhalations controlled the convulsions produced by santonin. He naturally argues that the same treatment should be pursued in the human subject when a poisonous dose is taken. - *Lancet.*

Bromohydric Acid.—Dr. Milner Fothergill, in a short communication to the *British Medical Journal*, states that the acid can be obtained by dissolving ten ounces, six drachms, twenty-eight grains of potassium bromide in four pints of water, and adding thirteen ounces, one drachm, thirty-seven grains of tartaric acid. The bitartrate of potash is precipitated and the hydrobromic acid remains in a clear, bright, almost colourless fluid, possessing an acid taste and the ordinary acid properties as well as the peculiar properties of potassium bromide, as compared with any other salt of potash. Dr. Fothergill has had a twelve-months' experience of the drug. It prevents, he finds, the occurrence of headache, which some people suffer from, after taking a dose of quinine. It is useful in nervous conditions, and, combined with quinine, is excellent in those cases where there is much nervous exhaustion from excessive indulgence in tea or in alcohol. It proves very serviceable in forms of excited action of the heart connected with general nervous excitability or nervous exhaustion. Given with quinine (of which it is a capital solvent) it gives better results than the bromide of potassium and digitalis. In all hysterical conditions, connected with ovarian excitement, it seems to have all the properties of the bromide of potassium. It is equally useful in the vomiting of pregnancy, and seems to exercise quite as powerful an influence over acts of reflex origin as does the bromide. It is especially adapted for the relief of hæmorrhage associated with sexual excitement, and is even more effective here than the bromides themselves. It is also of use in whooping-cough, combining conveniently with quinine. With spirits of chloroform and syrup of squills it forms a most agreeable and palatable cough mixture. Where there is gastric irritability it is the most useful of all acids. The dose, prepared as above, is one drachm as a full dose.—*British Medical Journal*, July 8.)

The Prevention of Masturbation.—This injurious habit is often most difficult to break. Dr. Yellowlees, of Glasgow, speaks of a mode he had tried in a dozen cases, and so far as it had gone he was very much satisfied with the results. The oldest case was eighteen days. The suggestion was founded upon the anatomical fact that the prepuce was anatomically necessary for the erection of the penis. Its anatomical use was to give a cover for the increased size of the organ. If you prevented the prepuce going to that use, you would make erection so painful that it would be practically impossible, and emission therefore extremely unlikely. What he had done was to deal with the prepuce at the very root of the glans, to pierce it with an ordinary silver wire, the ends of which he tied together. He had the case of a lad who was so extremely addicted to masturbation that his mother begged him to do what he could to prevent it. He used the apparatus first in the case of this boy with most excellent results. He had been masturbating night and day, and he was now so well that he was working as a carpenter. Dr. Yellowlees said further that he had eleven more patients all going about with wires in their penises. There was only one case where he had to take it off, the wire causing a good deal of irritation.—*Medical and Surgical Reporter.*

Translations.

Abscess of Liver taken for a Purulent Pleurisy, Thoracentesis.

From Le Progres Medical.

On 29th July, 1875, a man named C. Felix, thirty-one years of age, entered the wards of M. Guyot; he was a turner by trade; had always been healthy, but now complained of a violent stitch in the right side, accompanied with cough, and fever at night. Six weeks previously he entered the Hospital Beaujon for this pain, and went out fifteen days later much relieved. He had been treated, according to his own account, for a dry pleurisy, and a large blister had been applied on his right side. On his admission there existed a tolerably large swelling extending backwards and to the right on a level with the 7thand 8th ribs; the swelling was painful on pressure, but devoid of either heat or redness of the skin. On percussion there appeared dulness over the lower fourth of right lung, together with absence of the vesicular murmur, and no friction. The thoracic vibrations were defective in the lower quarter of both sides of the chest. The live appeared to be slightly depressed. The patient was feverish (axillary temperature 39°.3); tongue white, appetite gone.

August 6th. Fever persists, the intumescence of right side increasing and affording a very clear sensation of fluctuation; the trocar of Potain's apparatus was thrust into the middle of the swelling, and some drops of pus ran out; the trocar was withdrawn, and a free opening made with a bistoury. The thoracentesis was made in the 9th intercostal space, and gave vent to a half-litre of badly formed pus, but without odor. Irrigations were performed twice a day by means of Potain's apparatus. During the first fifteen days after the operation the patient regained strength, the appetite was excellent, and everything gave promise of a speedy cure. Not more than 40 or 50 grammes of fluid could be made to enter the purulent cavity; but the fluid which returned was always coloured with blood.

In the beginning of the month of September, there was a return of the night-fever (night sweats?) and the appetite diminished; the patient complained constantly of a violent pain in the side; he subsequently sustained a diarrhœa which nothing was able to control, and in the end he succumbed to marasmus, on the 26th October, 1875. The autopsy was made forty-eight hours after death. On opening the thorax the pleurae were found slightly adherent, but not sufficiently to prevent the adhesions being broken down by the hand, similar to those which are met with in nearly all necropsies. The right lung was slightly shoved up by the liver, was large and adherent by its right margin to the ribs, an adhesion which was broken down in making traction on its left margin. It then presented on it sright surface a large vegetation, with a central cavity communicating directly with the opening of the external wound. This cavity with its fungous, grisly, sprouting edges would contain a large hen's egg. The hepatic peritoneum was healthy throughout the rest of its extent. In cutting into the liver on a level with this excrescence it was seen to extend into the hepatic tissue for a depth of two or three centimetres, and to present in this plane a greenish-grey colour, then the liver tissue appeared of its natural colour. The liver was fat, and presented in its substance two or three abscesses containing laudable pus within organized walls. The microscope showed that these membranes were formed of lamellated coats of connective tissue, with some few connective tissue cells. No trace was found of echinococeus hooklets. Some greyish friable concretions of the size of a pea were moreover found scattered throughout the hepatic parenchyma. The right kidney was enlarged, encapsuled in a shell of false membranes; at the pelvis it was anæmic and fat. The state of the left kidney was similar, but its capsole was healthy. The lungs were emphysematous. Visceral p ericardium showed some white patches; nothing in endo cardium. Spleen normal.

On Blisters in Pleurisy.

PAR. DR. BESNIER.

(From Le Paris Medical.)

"According to M. Besnier, blisters are exceedingly efficacious in pleurisy, provided that they are had recourse to it at the outset of the disease, or as soon after as possible.

This means gives medium results when they are employed late, that is to say, at the fall of the fever, as is the ordinary practice. M. Besnier prescribes no other treatment, and so far he has obtained with it the most satisfactory results, not only in the ordinary practice of the city, but also in the department of charity, that is to say, amongst a population which furnishes in the civil hospitals the most cases of pleurisy for thoracentesis. A blister applied thus early, at the beginning of the attack, is not prejudicial, and aggravates neither the general nor the local symptoms. The febrile movement produced by the blister is only transient and cannot at all effect that of the disease; besides that, injurious influence could not be explained, either by the reaction called forth by the irritation of the skin, or by that which would be caused by irritation of the kidney. In all times, blisters have been had recourse to in spite of febrile movement both in the malignant fevers, and in acute phlegmasias of all kinds. The experiments, reported in 1874 to the Biological Society by Dr. Gallipe, confirm the view of the Italian School, which regards this substance as a cardiac-vascular and antipyretic agent: the blister, far from being a cause of increase in the fever of the disease, would rather, in a given time, exercise a general, sedative action calculated to allay it (the fever); in any case, these experimental data are a proof much in favour of the innocuity of this means of treatment, so far as febrile complications are concerned. As to the local symptoms, if it sometimes happen that these resist the action of the blister and appear to be aggravated by it, this aggravation ought to be regarded as the effect of the disease and not of the blister, since this is much more frequently observed after the other forms of treatment, and when the inflammation has been left to itself. M. Besnier brought before the "Societé Medicale d'Emulation" the last four cases of acute pleurisy that he happened to treat in the first quarter of the year, and in which resolution had been obtained by one or two blisters in the course of from eight to fifteen hours; in one instance it was a case of pleurisy supervening in a consumptive, in the other, a pleurisy which appeared in an individual who had already had the same affection in the same side; the former attack having only disappeared after three months of treatment, and after the *late* application of nine blisters.

To conclude: M. J. Besnier does not pretend that this early application of the blister will be able to do away with thoracentesis altogether, but he hopes that such will be the case in the majority of instances.

Treatment of Typhoid Fever.

(From Paris Medical.)

One can see in the mortality tables how large a number of deaths typhoid fever has caused in Paris during the last few weeks; and as the epidemic is not yet actually extinct some notes on the treatment of the fever will not be devoid of usefulness.

The experience of a large number of clinicians of various countries has fully established this fact, that the majority of the grave symptoms of typhoid fever can be controlled, and that the rate of mortality diminishes when the temperature of the body is systematically reduced. The statistics of a very large number of cases demonstrate the truth of this proposition. The numbers furnished by Liebermeister will serve as an example. Of 1,718 cases first observed in the hospital of Bâle (Basle) and treated by various methods, the mortality was 27 per cent., whilst of the 1,121 cases treated by the antipyretic method, that is to say, by a method designed to systematically lower the temperature of the body, the mortality has been 8 per cent. During the treatment, relying for the most part upon the expectant method, it is observed that amongst those patients whose temperature is maintained at 40°, ten per cent. succumb. The best means of reducing the temperature of the body has appeared to be the cold bath at 20°, lasting from 10 to 20 minutes, and repeated every time the temperature rises to 38°8 or 39°.

Next to the baths are to be ranked the febrifuges, of which quinine and sulphuric acid are the best. The sulphate of quinine is largely employed by the German physicians, and they insist upon the necessity of giving the remedy in large doses. Liebermeister attaches a great deal of importance to this particular, in 1,500 cases of typhoid fever he has employed quinine in doses of from 20 to 25 grains without causing any

appreciable unpleasantness. By giving from 20 to 40 grains at a time, or in the course of an hour, the temperature is reduced several degrees, sometimes even to the normal standard, sometimes below, in the course of 12 hours. The temperature gradually rises again. If the toxic effects of sulphate of quinine be noticed it is necessary to allow 48 hours to elapse before recommencing its use.

For a year or two, the German physicians have been largely using Salicylic Acid as a substitute for quinine. Care must be taken that this acid is very pure. The remedy is given in doses of from 60 to 70 grains; this dose may be repeated the same day, if necessary, or be replaced by the Salicylate of Sodium, a soluble salt which readily supplies the place of the acid. A remission of the febrile symptoms is usually observed in the course of three or four hours after the absorption of the medicine; the temperature falls gradually from one to several degrees, and often reaches the normal standard; afterwards it rises somewhat again, but then a smaller dose, from 30 to 50 grains, is sufficient to secure fresh remissions. One point, which is not to be despised, is that the price of Salicylic Acid is about a quarter of that of Sulphate of Quinine.

Treatment of Carbuncle.

(From the Paris Medical.)

M. Jules Guérin wishes to save all carbuncles from the bistoury: this is the subject of a note he read at the "Académie de Médecine" at its last session. To his mind, all the occurrences which constitute the accidental malignity of carbuncle are the result of the absorption of septic fluids contained in the centre of the swelling; the indication, then, to be fulfilled is to prevent and neutralize the septic decomposition of indurations and pus in the carbuncle, and, on the other hand, to stop the decomposed material in its course, with a view of preventing local and systemic infection. To this end, M. Jules Guérin applies to the anthrax a large blister perforated in its centre, to permit of appropriate, topical applications for the neutralization of the septic germ, at the same time that they prevent its dissemination. This application has for its immediate object the mitigation of all the symptoms, the relief of the pain, the diminution of the hardness and redness of the swelling, in a word, its conversion into a benign and inert tumour, whose enucleation, if it be permitted, promoted by the ordinary means, takes place without any necessity for having recourse to the employment of the knife. If, after the evacuation of the matter has been completed, there remain a deep excavation, it is useful to paint the cavity with a solution of nitrate of silver, with a view of provoking the obliteration of the vascular orifices opening on the surface of the excavation, and of thus preventing the absorption of the transformed fluids. A boil is, in the author's opinion, only a "reduced carbuncle;" the same treatment is applicable to it, and is no less successful. What is the mode of action of the blister? In carbuncle, as in all cases where there is inoculation by transformed, morbid fluids, it is on account of the penetration of these fluids that the surrounding parts swell and inflame, and, according to M. Jules Guérin, the blister only acts in these cases by arresting resorption, by giving issue to the infected fluid, by depleting the parts that have been invaded by it and by causing its arrest.

Imbued with this idea, M. Jules Guérin has made a multitude of abortive applications of the blister in erysipelas, in malignant pustule, and, like Dr. Grzymala, of whom we lately spoke, in all cases where an inflammatory intumescence develops itself around a focus of suppuration or around a deposit of some morbid material.

Fracture of the Skull, Laceration of the Meninges and Escape of Cerebral Substance—Recovery.

Dr. Sante Simeoni (in the *Gaz. Med. Ital.*) records the case of a boy aged 14, of rather miserable constitution; pale skin, lymphatic temperament, light complexion, head large, almost hydrocephalic. He fell some ten feet, head foremost, striking on a small projecting stone. He did not lose consciousness, and at the time felt no pain, he rose with assistance and sat down. On examination the integuments over the left outer superior edge of the frontal bone were found divided by a wound

nearly four inches long, leaving a space filled with brain matter, squeezed out; deeper down is felt a depressed semi-circular fracture, convexity towards the right. The piece is fractured all around, but the greatest depression (nearly an inch) was at the right edge. It is about 4 inches long, bared, firm and immovable. Small fragments surround the escaped brain matter. The quantity of the latter (some on the ground) is that of a hen's egg.

Dr. Simeoni first and Dr. Messedagha afterwards tried to elevate the fragment, but not succeeding by measures justifiable under the circumstances, the case was treated by wet cloths, tightly bandaged on, and kept cold by a bladder of ice. The boy had walked up stairs to bed by himself. No untoward symptom except a little fever on the evenings of the second, third and fourth days. In the daily injections a white, rather fluid, pus would come out mixed with little pieces of brain, some dead and some unchanged, while the boy would eat his sweetmeats.

"On the depressed piece, although largely "denuded, as on a meadow which becomes "covered with flowers, little red tufts sprung "up everywhere, and transformed completely "the poor bald hollow into a red concave field, "on which stood in relief that white intertwin-"ing of inert brain matter," which was gradually washed away without making any effort at repair. The cavity was thus filled up by granulation, and at the time of writing was cicatrizing over, the boy being out to play on the 23rd day.

Insufflation and Continuous Pressure to Facilitate Certain Surgical Operations.

In a recent number of the *Gaz. Med. Ital.* we find the following:—"Under the above title "Dr. Julian Aguilas published in the *Reone* "*Medico-Choringicale* of Buenos Ayres, a new "operative procedure employed in that city. "Insufflation consists of the introduction of a "certain quantity of air into the subcutaneous "and intra (inter ?) muscular cellular tissue, "rendering more easy certain operations, espe-"cially the extirpation of tumours." The method of using it is simple: A fold of skin is caught up by Pean's forceps and perforated, and air is slowly pumped in by a force pump at the will of the operator. The same method holds good for the deeper layers. The different layers of tissue are thus separated the one from the other. Under the skin we find layers of cellular tissue more or less abundant, the succession of which does not vary with the morbid products; they are isolated by this method by means of a layer of air, and, the first incision being made, the finger of the operator does the rest. When the operation is to be made in very vascular regions, or the disease has invaded important organs, insufflation frees from the dangers inherent to operative procedures. If the principal vessels of the region, arteries or veins, or the nerves are involved in the degeneration, one finds all around them a layer of inflated cellular tissue, which facilitates their dissection; the same is true of tendons. . . . If the operation is in the neighborhood of organs which might be easily injured, as the intestines, in strangulated hernia, inflation renders great service. One of the great inconveniences of this method is the artificial emphysema, which is produced by the insufficiency of means limiting it; but in this case we have never, says the author, observed ill effects. Along with this method the author, to arrest hæmorrhage, employs the continuous pressure by means of Pean's apparatus. — *Tribune Med.*

Physiological Action of Vanadium.

Priestly Platts arrives at the following conclusions:—1st. Vanadiate of soda acts on the vaso-motor nervous centre, and on the intra-cardiac nervous ganglia; produces diminution of the vascular tension, and renders the pulse weak, irregular and intermittent. 2nd. It acts on the respiratory centres; at first accelerates the respirations, then diminishes them and renders them more or less intermittent. 3rd. It is without effect on the nerve trunks and their terminal expansions, but exercises its action on the spinal centre. 4th. It does not act in any way on the muscular fibres. (*Gaz. Med. de Bordeaux.*)

Capillary Puncture of the Bladder.

(From the Paris Medical.)

Dr. Edward Martelli, Surgeon to the Hospital of Novaro (Italy), has practised capillary puncture of the bladder eleven times in five days in a man suffering from ischuria, the result of hypertrophy of the prostate and associated with false passages in the urethra. The first puncture was made on the 19th of April, 1876, at 10 o'clock in the morning; the second at 10 in the evening; the third during the night; punctures were again made with Dieulafoy's aspirator twice on the 20th, 22nd, 23rd, and 24th.

Dr. Martelli, who had not succeeded in passing any sound before the first operation, was able to introduce a No. 2 gum-elastic after the 11th. This sound was allowed to remain in for three days. Before passing a larger sound into the bladder, M. Martelli desired to allow his patient to rest. He spontaneously voided some drops of urine; later, the stream of water became normal. In the end of May, M. Martelli stated that the patient had micturated easily and plentifully since he left the hospital (Gazzetta delle Cliniche, Torino).

This clinical fact demonstrates the harmlessness of capillary punctures of the bladder, but it mentally occasions the reflection that the obstacle to the introduction of the bougies could not have been a very serious one. Since after a No. 2 sound had been permitted to remain in the urethra for three days, the urethra regained its permeability. An operation, be it never so simple, is never entirely devoid of a certain amount of danger. Something evidently escapes us in this report; for the surgeon of the hospital of Novaro ought to have had very good reasons for doing this operation, which do not appear in the report.

Cyanide of Zinc in Acute Articular Rheumatism.

Translated from the *Paris Medical.*

The Cyanide of Zinc has been administered in nine cases, in doses not exceeding five centigrammes in the twenty-four hours, according to the following prescription:—

Cyanide of Zinc, 5 millegrammes.
Gum Arabic.
Sugar of Milk, āā 9 centigrammes.

To be made into one pill; two to five of the pills to be administered daily.

M. Deschamps gives the results of nine cases, and makes the following remarks:—

"That the Cyanide of Zinc, in small doses, has proved a valuable remedy in acute articular rheumatism. Under its influence the pulse has rapidly lowered, sometimes even most remarkably; the pain has speedily diminished, but the temperature has not been lowered. On the second or third day there has always been an exaltation of temperature, notwithstanding that the pulse has been lowered in frequency.

Business Management.—Twenty-two physicians of Meadville, Pa., and vicinity, have adopted what appears to us a sensible and proper expedient to prevent unworthy patients cheating the doctor. Their action is shown in the following resolutions:—

Resolved, by the physicians of Meadville, that we, and each of us, will, within thirty days from date, furnish our accountant, ———, Esq., a complete list of our delinquents belonging to the class referred to.

Resolved, That Mr. ——— is hereby authorized to notify each of said delinquents, by printed circular, of such delinquency, the amount of arrears, and to whom due, with the information that if these arrears are not paid or satisfactorily arranged within thirty days from date of such notice, their names will appear on the general printed black list.

Resolved, That the undersigned hereby pledge themselves not to give prescriptions, medical advice or attention to those who permit their names to appear on said black list, unless the payment of the fee shall be secured before such services are rendered.

Resolved, That nothing in the above shall apply to those who are not able to pay, or interfere in any manner with that work of charity which every humane and honourable medical man delights to perform.

(So say we.—Ed.)

THE CANADIAN

Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, NOVEMBER, 1876.

TO OUR SUBSCRIBERS.

☞ We shall be glad to hear from those who have not yet paid their annual subscriptions. We cannot afford to send the Journal gratis, and as the end of the year approaches printers' bills must be paid. Accounts will be enclosed to each subscriber next month, but we trust that few will need that intimation of their indebtedness to us. Our expenses are heavy, and even the great appreciation which has rewarded our efforts, gratifying as it is, is hardly *substantial* enough to meet them.

PHYSICIANS' HOLIDAYS.

A short paragraph in our last issue headed "Premature mental decay," should be regarded thoughtfully by a large number of our readers.

There is no human occupation which taxes the vital energies equal to the practice of medicine. A physician, engaged in a lucrative, general practice, is often regarded with envy by his less favoured compeers, but it is a question if he is not rather to be pitied than envied.

There is no doubt we may have too much of a good thing, and while it is very gratifying to be in receipt of a large income, yet if that income is secured, as it must be in our profession, at the expense of every home comfort, of necessary rest, constant mental anxiety, fatigue and annoyance, only to culminate in premature mental decay, and early death, then we say, that man is best off who has only a moderate share of the world's good things. It is far better to practise a little economy in order to make ends meet and provide for a growing family out of a moderate income. There is no calling under the sun wherein haste to get rich is more fatal and likely to be followed by more disastrous results than in the practice of medicine.

In the severe study imperatively required to secure an honourable position in the profession and the constant application of the mind in one line of thought, entailed by the close pursuit of a large medical practice, we have just the conditions most favourable for a premature break down in the delicate mechanism of the human brain and body. We do not say that close mental work, however severe, if there be variety enough, is likely to bring premature decay, but we do assert that the constant drudgery of our profession has such a tendency to the exercise of one set of faculties and the development of one train of thought, that unless we forcibly take ourselves away, into some other field of thought or play, we shall certainly rue the day when we refused to hear the admonitions of prudence and friends. We believe it is far better to charge more, if need be, and do less, and take time for recreation and rest, than to go on foolishly at high pressure, "till the silver cord be broken," and our families left alone when they most need our presence and counsel.

"My parting words of advice are, never mind at what loss, take your six weeks of holiday," said Dr. Golding Bird a short time before his death, at the early age of forty, after he had secured a reputation and an income rarely equalled, in our profession. What a pity he had not acted upon his own advice, but like some *we* know, he could not believe that hard work and close application would injure him, till too late.

Sir Henry Holland made it a rule to take two months every year for travel and change, and he has said he never lost a patient by it and often began a full round of visiting from the railway station on his return, before reaching his own house. All may not be so fortunate as Sir Henry, who was born under a particularly lucky star, but we know, from a personal experience of many years, that a physician can take his annual holiday of three, six, or eight

weeks without losing a single patient worth retaining, and with the most beneficial influence on his own health and life, and with great advantage to his clients.

We all know how hale and hearty Sir Henry Holland and Lord Palmerston were at threescore years and ten, and it is a matter of history how hard they worked and how regularly they played.

An editorial in the *London Lancet* for September 16th, under the caption of "A Medical Vocation," is so pregnant with truths and wholesome admonition of paramount importance, not only to the profession at large, but, and especially, to those upon the threshold of its pursuit who are about to cast in their lot with the many young aspirants of utility or fame who already crowd the avenues to that walk of life, and who are continuously waging an unequal strife against circumstances and contingencies which must inevitably predominate over the great majority in the end, that we cannot refrain from, and make no apology for, inserting a large quotation.

"The prizes within reach of the medical profession are not rich, and they fall to the lot of few. An equal amount of labour expended in almost any other department of energy will secure a better return. Looking to the simply worldly rewards of medical industry, it is strange that any well-meaning counsellor should instigate a youth with no particular ambition to distinguish himself in the applied science of physic, to choose the profession of medicine as a career. It cannot be an agreeable occupation to those who discern nothing beyond the daily duties of the physician and surgeon, and it will probably prove so distasteful to the uninspired practitioner as to destroy his chances of even average success. . . . . It is impossible to put the case too strongly, and we would ask those upon whom devolves the responsibility of advising or permitting an unwilling or apathetic choice of the profession to look once more around, and at the prospects before them, before it is too late to avoid a false step, which may land the victim of mistake or unwise influences in life-long discomfiture. . . . . .

"Each year makes the financial success of a routine practitioner in medicine more improbable, and it is the hope and aim of genuine professors of the science and art of physic and surgery to render this low form of success speedily unattainable. . . . It is not alone that the examination tests are being augmented in severity, a new mode of higher intelligence, and more exacting, is beginning to replace the old method of practice in all its grades and branches.

. . . "Let the friends and advisers of youths about to enter the state of medical pupilage fully recognise the responsibility they are about to thrust upon them. Unfortunately there is no 'noviciate,' and seldom an opportunity of retreat after the choice of a profession, and that to which these young men are devoting themselves is of necessity so exclusive—so fenced about with preliminary branches of study and shut out from view—that, possibly, not one man in a score clearly understands the future to which he is committing himself until some of the best years of his life have been spent in preparation for its practical duties, and in ignorance of its cares, its obligations, and its ever-increasing and heightening responsibilities. It is not only because medicine cannot be advanced by unambitious and unskilled professors, we thus speak, but men entering the profession without enthusiasm and a constraining love of enterprise in science cannot succeed; and their failure brings discredit on our craft, bitter disappointment to minds crippled by a first mistake, while lives are blighted which might have been happy and useful if the beginner had been better advised."

Words of ours can add nothing to this powerful, earnest and spirited appeal to the reason and common sense of those concerned; and we, therefore, send it forth to our readers without further comment than the assurance, to those who are not fully cognizant of the fact, that every word which we have quoted is as applicable to our own condition as to that of the profession in the Motherland—earnestly commending the facts therein set forth to the careful attention and deep reflection of all.

At a meeting of the New York Academy of Medicine, on September 21st., the inhalation of 4 or 5 drops of Nitrite of Amyl was strongly recommended as an antidote in Chloroform Narcosis.

Book Notices.

The Collateral Circulation in Aneurism. By A. W. Smyth, M.D., New Orleans.

Intra-Pelvic Phlegmonous Tumour. By Edward J. Bermingham. M.D., New York.

Proceedings of the Medical Society of the County of King, Brooklyn, N. Y.

Atlas of Skin Diseases. By Louis A. Duhring, M.D., Professor of Skin Diseases in the Hospital of the University of Pennsylvania. J. B. Lippincott & Co., Philadelphia.

Part first contains four plates, viz, eczema, (erythematosum), Psoriasis, Lupus erythematosus, and Syphiloderma (pustulosum). The *Atlas* will appear quarterly, with text explanatory of the case represented, &c., and will be completed in eight or ten parts. The illustrations are chromo-lithographs painted from life, and nearly life-size. They are admirably executed, and will enable American practitioners to become familiar with the appearances of those diseases of the skin which are most commonly met with on this side of the Atlantic.

Longevity of Jews.—Its Causes.—These are stated by the *London Medical Record* as follows:

1. *Keeping of two Sundays* in a week, besides which Christian and political holidays. Thus they have about twice as many days of rest as Christians.

2. Their *employments* are devoid of *hazard* as they do not engage in mining, mechanics, etc.

3. *Dietetics*, as enforced by biblical and traditional commands, are favourable to longevity.

4. The *sentiment de la famille* is better developed in the Jews than in the Christians. This assures to children, and aged and infirm parents a more active solicitude, to the newborn a mother's nursing, to the poor a more efficient assistance.

Their charity is unequalled, their morality demonstrated by judicial statistics. Their profound faith in Providence gives them a marked serenity of spirit and firmness of character. They rarely use alcoholic liquors to excess. They seldom marry out of their own race, and have little hereditary disease.

Miscellaneous.

Sir William Fergusson.—We are glad to hear that Sir William Fergusson continues to regain strength, and, on the whole, maintains his ground. He intends to return to London about the second week of October.—*Lancet.*

The Centennial Woman in Politics and Medicine.—It was a Kentucky statesman, Dr. Henry Watterson, who this year laid down the broad principle of Parliamentary law that no question is in order while a lady has the floor. Now comes the Philadelphia Reporter, and informs a correspondent that he not only has a right to consult with female practitioners, but is apt to be much improved thereby.

Sickness at Different Ages.—Dr. Reginald Southey has recently been delivering a course of valuable lectures on "Individual Hygiene" in London, and in one he introduced a table of "Expectation of Sickness," which he had prepared, and which is as follows:—At 20 years of age, calculate on 4 sick days yearly; at 20 to 30, 5 or 6 days; at 45, 7 days; at 50, 9 or 10 days; at 55, 12 or 13 days; at 60, 16 days; at 65, 31 days; at 70, 74 days. Of course this refers to people of average good health, and not to those who may be afflicted with any ineradicable or chronic ailment.

Prolonged Incubation of Vaccinia.—Dr. Jas. F. Pressley, of Suisun City, Cal., says, in the *Pacific Med. Surg. Jour.*:—As is always the case when we have a small-pox scare—every one desires to be vaccinated. Among the number who came into my hands, I had one case which was rather a curiosity. I vaccinated Miss ——— on ths 20th of July: it shewed no disposition to have the slightest effect, till the 30th day of August, forty days after, when the arm began to show signs of the vaccinia taking, and did take as well as any case that I have ever vaccinated.

Now might not this young lady have been exposed to small-pox, and forty days after, the disease develope itself?

Formation of Epidermis by the Transplanting of Hairs (*Boston Medical and Surgical Journal*, June 1, 1876).—Dr. Schweininger reports successful results in inducing cicatrization by transplanting to granulating surfaces hairs pulled out by the roots. Placed upon ulcers, they formed as many centres of new epithelial growth, which spread outwards, coalesced, and produced rapid and complete cicatrization. These islands proceeded without doubt from the cells of the outer rootsheath, which is continuous with the epidermal cells of the rete mucosum, so that epithelium is here developed from pre-existing epithelial cells.

Death from Chloroform.—A death from chloroform is reported from St. Thomas's Hospital. The patient, a labourer, aged forty-five, was admitted as an in-patient suffering from some disease about the trochanter of the right femur, and in order to make a thorough examination, and open up some old sinuses, he was placed on the operating-table and chloroform administered. Before complete anæsthesia had been induced, the pulse suddenly stopped. The breathing continued for some two or three minutes afterwards, during which every available method was tried to restore the heart's action, but without success. At the post-mortem examination, fatty degeneration of the heart was found, but all the other organs were healthy.

Domestic Dosage of Medicines (*British Medical Journal*, February 26, and *London Practitioner*, May, 1876).—Dr. Farquharson's Drop Table.

56	drops	distilled water	= 60 minims.
113	,,	tinct. opii	= 60 ,,
114	,,	tinct. digitalis	= 60 ,,
100	,,	liq. morph. hydrochl.	= 60 ,,
80	,,	oxymel scillæ	= 60 ,,
75	,,	syrup papaveris	= 60 ,,
45	,,	glycerine	= 60 ,,
114	,,	spts. ætheris nitrosi	= 60 ,,
112	,,	tinct. camph. comp.	= 60 ,,
55	,,	acid. sulph. dil.	= 60 ,,
55	,,	olei ricini	= 60 ,,
110	,,	spts. terebinth.	= 60 ,,
100	,,	ol. anisi	= 60 ,,

The St. Petersburg Lying-in Asylums.—In a recent inaugural dissertation, Dr. Stoltz gives an account of the working of the ten Lying-in Asylums that have been recently established at St. Petersburg. Established on account of the danger that exists in the agglomeration of puerperal women, these asylums have only three or four beds in each; and although many of these are placed in very insalubrious districts, a six years' experience has proved their great utility. Of the 7,907 women who have been delivered in them, only eighty, or 1·1 per cent., have died, while at the three hospitals the mortality has been 3·6 per cent.; so that the lives of 200 women have been saved which would have been lost in the old establishments. Besides their great convenience in being distributed over the city, the cost of these asylums is much less than that of the hospitals, the expense of each patient being in the latter from nineteen to twenty-three roubles, while in the asylums it is only twelve roubles.—*St. Pet. Med. Woch.*

French Association for the Advancement of Science.—M. Tripier, of Lyons, drew attention to certain dangers attending the administration of ether to children. In three patients, aged from five to eight years, this anæsthetic produced stoppage of respiration—but not, fortunately, of the heart. From experiments on animals, M. Tripier concluded that this result was due to the action of the ether upon the nervous centres, and not to the local irritant effect of the vapour upon the bronchial mucous membrane, as he at first believed. In such young subjects, then, he had discarded the use of ether, and had returned to chloroform.——M. Gallard read a paper "On some Changes in the Mucous Membrane of the Stomach," referring especially to the rupture of minute miliary aneurisms as an occasional cause of hæmatemesis.——M. Letievant, in a paper "On Resection of the Superior Maxilla," advocated the desirability of preserving the integrity of the infraorbital nerve, in order to avoid the muscular atrophy that follows its division. He drew a striking parallel between two cases—one in which this nerve was, and the other in which it was not, divided.—*Lancet.*

A Battle Over a Bed-bug.—A sprightly quarrel is in progress among the homœopaths on the subject of bed-bugs. A number of years ago this interesting animal was introduced into their materia medica, in company with *pediculus capitis, crotalus horridus* and other lively medicines. In spite of some opposition from individuals, it gained a footing, and now holds a permanent place in *Allen's Homeopathic Materia Medica*, a standard authority. Dr. J. P. Dake, one of the strong men of the sect, wages war against it, his last demonstration taking the form of a lengthy artical in the June number of the *Hannemannian Monthly*. In this, however, he almost surrenders, declaring that "as it had been admitted to the pages of the *Encyclopedia* by Dr. Allen, I will no longer protest against its remaining there, as it may be, after all, the 'right thing in the right place.'" Now that the question is stilled, it is to be hoped the demand for the valuable medicine will be so active as to prove beneficial to those localities where bed-bugs are *not* regarded as "the right thing in the right place."—*Pacific Med. and Surg. Jour.*

Death from Chloroform.—We believe that this is the third death from chloroform which has occurred at Leicester within six months, that in all the cases the patients were men, between fifty and sixty years of age, and that in each there was a history of hard drinking. These cases should press very strongly on the profession of Leicester the question of chloroform *v.* ether. We believe that some of the best London surgeons have long settled the question in favor of ether on account of its unquestionably greater safety, and that for years they have not performed an operation under the influence of chloroform. The same lesson is taught very clearly by one of two deaths which occurred in London last week, while the patient was under the influence of chloroform. The history was that so common in such cases—violent struggling, stoppage of the pulse, death, and fatty degeneration of the heart discovered afterwards. The other case was the result of the administration of chloroform when the stomach was full of food, and illustrates too well the danger of such a practice, in this case unavoidable. A vomit was followed by a deep respiration, and the trachea and larynx filled with half-digested food, so that even tracheotomy did not restore the power of breathing.—*Lancet.*

A Pulse of 21.—A remarkable instance of slow pulse is at the present time in M. Tillaux's service at the Lariboisière. The patient, a *chiffonnier*, seventy-seven years of age, came in to be treated for hydrocele, in all other respects seeming well, and jovial in his manner. It was almost by accident discovered that he had a pulse only of 21. It is regular, the two sounds of the heart and the short interval of silence that separates them occupying scarcely half a second. But the "grand silence" is extraordinarily prolonged, so as to continue nearly two seconds and a-half. During this absolutely nothing is heard in the heart—not the slightest souffle. But with the first sound a very distinct souffle is heard, which, continuing during the "petit silence," terminates suddenly with the valvular clap which constitutes the second sound. The heart seems large, its apex beating more externally and lower down than in the normal state. There is some emphysema of the lungs. The pulse was counted carefully four days in succession, and the intervals were found to be perfectly equal, and the same on both sides. The patient, who entered the hospital on August 5, has had some attacks of syncope since then, and at the present time he is suffering from considerable œdema of the legs.—*Gaz. des Hôp.*

Cholera Infantum—Its Treatment.—Dr. E. W. Emerson (*Boston Med. and Surg. Jour.* July 27, 1876) gives the following views respecting the treatment of cholera infantum. The indications are :

1. To correct the dangerous and unfair distribution of the blood in the body, to which the purging, vomiting, cramps and coldness seem to be directly due, and later the greater danger of coma, convulsions or paralysis of the heart.

2. Failing in this, or not succeeding until too late, we should supply the water and perhaps the salts drained from the blood, as the thickening of the blood would prevent the good effects of a natural turn of the disease, and perhaps dispose to various organic lesions.

3. We should attend to the general hygiene, diet, etc., of patients.

To meet the first indications he recommends

either a hot bath of from 99° to 104° F., or hot mustard packs. Some cases treated by the writer in this way did admirably. They were suddenly wrapped to the chin in cloths wrung out in hot water and mustard, with a blanket outside, and fed with ice water and a little brandy. This was continued for a half hour or more, the mustard sheet then withdrawn and the child left enveloped in the warm, moist blanket. The second indication is fulfilled by feeding constantly with ice or spoonfuls of ice water, or small enemata of salt water after a dejection.

Aortic Regurgitation Treated by Digitalis.—Dr. G. W Balfour (*Edinburgh Med. Jour.*) says that in no other disease is digitalis of more value than in aortic regurgitation, and there is none other in which its curative action can be more sufficiently demonstrated than in this. The great danger in aortic incompetence is death from asystole, depending upon over distension of the left ventricle. As soon as any regurgitation takes place the interior of the left ventricle is (when the patient is in the erect posture) being constantly dilated by a force equivalent to the weight of a column of blood the height of the cranium above the heart, and of the diameter of the ventricular lumen. The hydrostatic pressure accordingly increases with the gradual dilatation of the ventricle. Now the value of digitalis consists in this—that by its judicious administration it can produce such an amount of tonic contraction of the ventricle as shall rather more than counterbalance the dilating power of the arterial column. In order that this effect may be produced, the drug requires to be given freely to cause a certain amount of contraction of the apex and diminution of the cavity of the ventricle. There is no danger of pushing the drug too far so long as the flow of urine continues free. If the quantity of urine begins to fall and the pulse commences to thump or falter, the drug should then be discontinued.

Fresh Brain Tissue—A Rapid and Simple Method of Preparing, Staining and Mounting.—Dr. John H. Arbuckle (*Glasgow Med. Jour.*, April, 1876) gives the following method, which, for observing the minute details of structure, is superior to all others:

The glass slide is first made perfectly clean; a small thin section of brain is made with a sharp scalpel, previously wetted with water; the section is placed on the slide. The under surface of the cover is well oiled with a drop of oil of cloves and placed over the brain substance with the oiled surface next to it. It is then pressed till the thinnest film of brain only remains between the cover and the slide. The whole is then immersed in a small saucer containing methylated spirits, which gradually finds its way between the slide and cover, and dissolves the oil of cloves. After remaining in the spirits for a few moments the slide is taken out; a few drops of spirits are put upon the slide, and the cover is at one edge gently raised, when a greater quantity of spirits gets between the cover and the slide. The cover is now lifted off, and the brain substance remains upon the slide in a thin film.

To stain this film it is first placed in spirit, and after a few seconds removed, and the spirit allowed to run off. A drop of solution of aniline (g. i to ʒ i) is now placed on the film. This is allowed to act for a couple of minutes, and then all the superfluous solution washed off by placing the slide in a basin of clear water. On removing the slide from the water it is placed in clear spirit or absolute alcohol to further dehydrate it.

To mount the film the slide, after fifteen minutes, is removed from the spirit; the film is cleansed by a drop of oil of cloves. When transparent all the oil is run off, the slide cleaned, and a drop of Canada balsam dissolved in benzole is put upon the brain film; then the cover is placed on it, and when allowed to dry it is permanently mounted.

The whole process need occupy but a few minutes.

Oath of Pharmacists.—We translate from the weekly journal of *Pharmacie* (1870, No. 50), the old French oath of pharmacists of 1336, curiositatis causa, and of illustration how much tempora mutantur:

Oath of the Christian and Godfearing Apothecaries:

First. I swear and promise before God to live and die in the Christian religion.

Item. To honour, to esteem and to serve as much as I can, not only the doctors of medicine who instructed me in the knowledge of rules of pharmacie, but also my preceptors and masters with whom I learned my trade.

Item. Neither to put an affront upon one of my old doctors and magisters, or upon others, however they may be.

Item. To add as much as I can to the glory, honour and majesty of medicine.

Item. Not to give any emetic to an acute diseased person without before asking the advice of a doctor of medicine.

Item. Not to touch the pudenda of a woman, except in case of urgent necessity, id est, if there a remedy should have to be applied.

Item. Not to give poison to any one and never to advise anybody to do so, even not to my worst enemies.

Item. Not to give an abortive.

Item. To execute minutely the orders of physicians without adding or omitting anything, as far as they are according to the rules of art.

Item. To contradict and to avoid like the pest the scandalous and the most destructive manner of practising of charlatans, empirics and alchymists, the high disgrace of the magistrates who allow them.

At last. Not to keep poor and old drugs in my shop.

The benediction of the Lord be with me as long as I follow these vows. So be it!—*Deutsche Mediz. Wochenschrift.—Can. Med. Record.*

Comparative Researches on Milk.—Langaard has recently made some comparative researches on human milk, and that of the mare and of the cow. He corroborates the statements made by Biedart in regard to the differences between the milk, and especially between the casein of the cow and that of humankind. Langaard notices that in koumiss the casein exists in the form of extremely fine flocculi. He finds that mare's milk (*stutenmilch*) is of alkaline reaction when fresh, and retains its alkalinity for two or three days, but then passes into an acid fermentation. It does not then, however, like cow's milk, assume a gelatinous form, but the casein separates in small flocculi. Dilute acids precipitate the casein immediately, but it is readily soluble in an excess. In the case of cow's milk the casein falls in dense masses, which do not readily redissolve in an excess. Alcohol and tannin precipitate the casein of mare's milk completely. If the casein be precipitated by alcohol and deprived of fat by ether, it may be obtained in the form of a fine, loose, slightly yellow powder, that resembles the casein of human milk in its solubility in water, dissolving much more easily than the casein of cow's milk. The watery solution is slightly opalescent, foams on being shaken, and has a neutral reaction. The dry casein is digested as rapidly as that of the woman. Langaard suggests that it would answer well as a preserved preparation.—*Lancet.*

Organization of Thrombus.—An interesting memoir on the organization of thrombus has just been published by Dr. Paul Baumgarten, of Konigsberg. His observations were made both on arteries and veins, to which two ligatures had been applied. He finds that both in the segment to which the double ligature has been applied, and in the parts of the vessel immediately above and below it, a new cell formation takes place beneath the lining membrane Nuclei first make their appearance beneath the endothelium by which they are invested: these increase in number, and speedily undergo a differentiation, those nearer the lumen of the tube becoming elongated and concentrically arranged, representing a new muscular coat (though they do not give the usual picric acid reaction), whilst those situated more internally send out processes and form an irregular network. The coagulum or thrombus retreats before the growth of these cells without presenting any indication of cell-proliferation. Near the points where the ligatures are applied new vessels penetrate into the cell-growth, which are derived from the neighbouring connective tissue, and thus gradually a vascular connective-tissue growth is formed. M. Baumgarten attributes the formation of the new growth to the proli-

feration of the endothelial cells of the vessels; first, because in the early stages of the process all intermediate stages between the endothelial cells and the fibre-cells resembling muscle-cells may be seen; and, secondly, because he has been able to follow similar changes in a portion of vein confined between two ligatures, when the blood has been evacuated and replaced by some irritating fluid. It will hence be seen that he considers the self organizing power of the red clot to be *nil.* The only remains of it that are left after the lapse of some time are particles of pigment scattered through the new growth. —*Lancet.*

Births, Marriages, and Deaths.

BIRTH.

At Richmond, Surrey, England, on October 4th, the wife of Dr. A. H. Wright, of a son.

MARRIAGES.

At St. James' Church, Dundas, on the 10th inst., Charles O'Reilly, Esq., M.D., son of the late Dr. O'Reilly, of Hamilton, to Sophia Elizabeth, eldest daughter of the late Geo. Rolph, Esq., of Dundas.

On Tuesday, the 10th inst., at Grace Church, Brantford, by the Rev. R. H. Starr, M.A., Mr. Geo. R. VanNorman, jr., to Hettie S., youngest daughter of Dr. Mason.

DEATHS.

At Newcastle, on the 12th inst., Elizabeth Ogg McKenzie, wife of William N. Rose, M.D., aged 67 years.

At his residence, King street, Dundas, on Wednesday morning, October 11th, Henry Charles Rutherford, M.D., aged 68 years and 4 months.

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TORONTO, DECEMBER, 1876.

Selections: Medicine.

CLINICAL DEMONSTRATIONS OF PHTHISIS.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

BY JAMES EDWARD POLLOCK, M.D., F.R.C.P.,
Senior Physician to the Hospital.

LECTURE IV.

GENTLEMEN,—I beg your careful attention to-day to the modifications of phthisis which take place from fibroid alterations in the lung and pleura. They lend a decided stamp and character to those forms of disease in which they prevail, and are among the most important of the agents which modify and prolong the progress of the affection. They are therefore of the highest interest in prognosis, and their clinical recognition is an essential to accuracy. I must decline to assign the name "fibroid phthisis" to any one variety of the disease, for there is no such idiopathic affection to be met with in practice; while, on the other hand, I hope to show that every chronic form of lung disease may become modified and shaped, so to speak, by an over-development of fibrous tissue. In speaking of the pathology of phthisis, I pointed out that the adenoid tissue of the lung, which surrounds the vessels and bronchi and is found between the lobules, becomes increased and hardened, grows under irritation, and thus compresses the alveoli, contributing to their obliteration, and also strangles the minute bronchioles and bloodvessels, interfering both with the nutrition of the lung and with the direct supply of air to the seat of disease. You will remember how the fibrous tissue is also subpleural, in which position it also is capable of overgrowth from irritation. But overgrowth is not its only character; for in progress of time it shows its power of *contractility*, so that lessened volume of the lung results, and even a diminished pleural cavity. On these two characters of primary *overgrowth* and secondary *contractility* depend many of the physical changes in all chronic structural diseases of the lung and pleura. For remember that this fibrous contractile tissue is spread like a net throughout the lung, enveloping its vessels, extending along every ramification of bronchi and pulmonary arteries, and is in direct communication with the lining of the lung, and, in pleuritic cases, with the chest-walls themselves. The alterations in the chest-walls, from mere flattening of small portions of the chest to the contracted side with shoulder dragged down and fixed, are therefore mainly due to those toughened fibrous bands gradually binding and compressing an organ which was originally elastic and free to play in a cavity the walls of which underwent momentarily the most complex yet free movements of expansion and return. Inspect a healthy chest, and you are struck with the beauty and freedom of its play; while the eye can detect at a glance even a portion of the parietes where the alveoli have collapsed and the fibrous element has been developed and has commenced its contracting and limiting power over the chest movements. Now, first, let me impress upon you that the changes which the lung undergoes in this hyper-development of fibrous contractile tissue are of *various origin*, but of *one import*. Of various origin—for pneumonia, bronchitis,

pleurisy, and tubercle can all give rise to fibroid lung; but of one import—for wherever you see a somewhat advanced condition of the contracted lung you may be sure that nature is attempting prolongation and cure, and that chronicity is likely to be the stamp of the affection. Remember also that the *acute* lung affections, pneumonia and tuberculosis, are the only ones in which we do not find fibrous changes. Where rapid resolution of disease-products is possible, or where continuous destructive changes throughout every tissue of the lung are inevitable, there you have no fibroid formations. The chronic conservative changes in cases of old disease of the lung and pleura are intimately and necessarily associated with fibroid development, and this element is the active opponent of extension. Only remember the normal state of a lung, exquisitely elastic, permeated by countless air-currents, the seat of a double circulation, delicately balanced in an air-tight cavity in which the uttermost freedom of play is secured by a pellucid and smoothly oiled membrane, and conceive what would be the consequence to its tissues and its functions if, when a portion is blocked, all the air and vascular supplies were to have their usual access to the diseased part, and its movement to remain unrestrained. We can enumerate easily the important effects of a hyper-development of a fibrous contractile tissue. It lessens the air and blood supply; walls round the diseased product; limits the movements of that portion of lung, and ties it down through the pleura to the chest-walls. It thus guards against hæmoptysis and against pneumothorax, lines and circumscribes cavities, and shuts up the injured portion of lung. There is no case of chronic disease of the lung in which fibroid changes do not occur, and you will now apprehend my reasons for declining to recognise "fibroid" as a distinct variety of phthisis. I shall describe to you the most characteristic form of modification of old phthisis which fibrous change affords; but you will remember that you are looking at an old phthisis all the time, and not at a new disease.

Let us take, then, a well-marked specimen of fibroid alterations in the living subject, and consider its *characters*, *symptoms*, and *pathology*.

You will find a patient, generally beyond the age at which phthisis is most prevalent, who has had a chronic cough perhaps for years. He has had all the symptoms of phthisis of a protracted kind: gradual but slow marasmus, hæmoptysis, febrile attacks with long remissions. And when you first see him in these wards, he is perhaps free from any of the more urgent symptoms, for his temperature may be normal, his cough moderate, and his digestion unimpaired. He complains most of dyspnœa. Most generally he has no hereditary predisposition to phthisis; but if you examine into his history, you will find that either he was the subject of pleurisy or of pneumonia in an acute or sub-acute form, or his occupation had been dusty—*i. e.*, he had worked in a mill or factory, or been a stone mason or a collier; for dusty occupations, which help to impact the lung mechanically, produce this form of phthisis. Watching your patient for months, as we do here, you will discover in him a certain immunity from the common events of phthisis, as spreading destruction of lung, copious hæmoptysis, diarrhœa, night-sweats. He remains, in fact, pretty stationary in our wards, and does our treatment little credit; while he does not, on the other hand, slip down into the hopeless condition of marasmus with fever. If you examine him in the final stage of all, you observe that he becomes exhausted by gradually impaired sanguification or by intercurrent disease of the opposite lung, which had remained sound for many years. Now strip and examine him, and what do you find? You are struck at once with the contraction of one side, flattening and retraction of the walls to a considerable extent, and, of course, lessened movements. The affection then is unilateral, and, curiously enough, it is by far most commonly seen on the left side (in 31 instances out of 39). Examine more carefully, and you will find that not only is the lung contracted, but the adjacent parts are displaced. The heart is perhaps drawn up to the extent of two inches, or it is drawn round into the back part of the left axilla, as in the patient in Eldon ward. Should the affection be right-sided (the rarer form), you may have the heart's apex beyond the right nipple; the diaphragm is drawn up on the

affected side, leaving a hollow under the ribs; and the opposite lung will be found expanded across the middle line, and often beyond the left margin of the sternum in left-sided cases.

These alterations of position are of great interest, and assist both your diagnosis and prognosis, for they help to establish the contractile nature of the lung changes, and such cases have on them the stamp of chronicity. The changes are due to positive retraction of the diseased lung itself, to necessarily lessened movements and diminished volume of one-half of the chest, and to atmospheric pressure. Such cases are of great importance in studying the physiology of the chest movements. By inspection alone, then, and palpation, you will have derived a great deal of information about your patient. From *percussion* you will further learn that there are patches of induration in various parts of the lung, perhaps at the base or middle of the lung at the back. Percussion, of course, will also show that the opposite healthy lung has been drawn over. The whole side is also duller than the opposite, but it is very dull around the base or in certain parts. *Auscultation* will show you that over these dull parts there are sounds indicating cavity, loud blowing with, perhaps, resonant voice, and even pectoriloquy with gurgle or cough. Pathologically we know that these signs may mean *dilated bronchi* or *cavities* in the ordinary sense. These excavations or enlarged tubes are found about the base or middle of the lung. They may be due to the ordinary extending ulceration of the lung or to a portion of indurated tissue breaking up, and very often to the death or gangrene of a portion of lung, whose nutrient vessels have in fact become strangled. As regards the dilated bronchi, they are caused by a loss of elasticity of the tubes and by a softening of the lung-tissue around them. Under such conditions the shock of cough, when often repeated, would produce dilatation of a portion of a bronchial tube. It has been noticed that pneumonia occurs in patches around these dilatations, and, indeed, the whole history of "fibroid" cases seems to be that of an indurating pneumonia in repeated attacks, and perhaps that variety which has been called "catarrhal" most commonly gives rise to this form of disease. You will notice that the matters expectorated are often pigmented, blackish or green, and occasionally fetid and gangrenous. Lung-tissue will be found when microscopically examined.

The pathological examination of these cases gives, as you may expect, a contracted indurated lung, of a dark greyish-marbled colour. Its tissue is hard and pigmented, and obliterated tubes or vessels traverse it in pale lines. The bronchi are often dilated so as to resemble cavities. Cavities there are, too, formed out of cheesy masses and destruction of lung-tissue, just in the ordinary way of phthisical cavities. These cavities are well-lined with a membrane, and are themselves traversed by bands representing the strangled débris of vessels and bronchioles. They undergo contraction too, and, if small, may finally close, presenting that puckered appearance of cicatrices with which you are familiar. The alveolar walls are thickened by fibrous growth, and the air-cells are often obliterated. It is rare to find during life any true breath-sounds in such a lung, for the element of vesicular elasticity has been lost, and the organ is in time reduced to a hardened tough mass, permeated by bronchial tubes, in parts dilated into cavities. The pleura is commonly thickened and adherent both to the lung and the walls of the chest, and dense interlobular bands extend from it through the lung.

In tracing the origin of this condition you will find but little evidence that it has a single starting-point, but much confirmatory evidence that it has various beginnings. It is very commonly seen after pleurisy, whether with or without effusion, in the earlier stages. Patients recover, of course, every day from an effusion of moderate extent, which may be rapidly absorbed, and leaves a slightly contracted side with resulting adhesions.

An inflammatory condition of both lung and pleura (pleuro-pneumonia, as it is called) is a more common cause; and should that block of lung be of a nature not easily liquefied and absorbed, it remains as a nucleus of fibroid degeneration. In considering pneumonia you will remember that I pointed out that if a hepatised or solidified lung does not resolve after the second month, the case is likely to pass into the phase of fibroid degenerative changes, and then

all the features are gradually developed which render it undistinguishable from chronic phthisis. You will have indurated patches of lung, with dulness, tubular breath-sounds and voice, proceeding to formation of one or more cavities or dilated bronchi, and the patient will emaciate, have febrile accesses and hæmoptysis. When you see such a case, with such physical signs more evident about the base and middle of the back part of the lung, and with progressively contracting side, you call it "fibroid lung" in modern terms; but is it not really a phthisis? Those who advocate the unity and idiopathic character of this affection point to its being left-sided and unilateral, and assert that it may be so distinguished. But in time the opposite lung will get affected, and in many instances it is a right-side disease.

Again, tubercle, properly so-called, will originate this form, and when retrogressive, as opposed to the progressive, the ordinary events of softening do not take place. The result is very commonly fibroid degeneration, with all the characters which I have described. Indurating pneumonia and pneumonic patches around tubercle are not to be distinguished by the scalpel or the microscope, and a combination of true fibroid changes with tubercle is daily seen in our autopsies. In the single limited cavity, with collapse of chest-walls, we have fibroid changes well marked in the lining and covering of the cavity, in the obliterated vessels crossing it, and in the interlobular thickenings around it. It is only in acute tuberculosis, with universal impaction of grey tubercle, or in the rapidly ulcerative phthisis, that you notice the entire absence of fibrous changes. *Bronchitis* is a less common origin of fibroid changes, but it is observed in children and others; in the former after pertussis or rubeola, when collapse of a portion of lung is apt to occur, followed by contractile fibroid proliferation. These phenomena may have modern names, but if you like to study the early observers you will find that they were not unnoticed by Laennec, who described the dilatation of bronchi and the tough fibrous state of lung around tubercular cavities. Andral described the inflammatory thickening and ultimate contraction of the lung; while the "cirrhosis" of Corrigan, and the "melanosis" of Bayle, referred to a like condition, only under varied forms. Corrigan's "cirrhosed" lung cases had cavities and ulcerated intestines, and other phenomena of phthisis. We must not then dispute about names, especially in this difficult transition period of pathology, but let us be careful observers of facts. It is remarkable that the greater number of these cases of fibroid change occur in *males*, and that the *age* of the patients is generally greater than in ordinary progressive phthisis.

The *diagnosis* of these cases is not difficult. The displacement of the heart and liver, and expansion of the opposite lung, may be due to other causes than fibroid change. In effusions into the pleura the heart is displaced to the opposite side of the chest; in fibroid it is drawn to the affected side, or drawn up. Again, in effusion the side is enlarged, and the intercostal spaces are prominent. The opposite conditions prevail in fibroid changes, and the liver is depressed in right-sided effusion, but drawn up (as is the diaphragm) in fibroid. The viscera are not commonly displaced in cancer of the lung, as the side is not contracted. The situation of the dulness, which is not unilateral, but crosses the middle line, and encroaches irregularly on the parts lying about the mediastinum, is characteristic of this disease, and not observed in fibroid phthisis. There is a curious condition of the ends of the fingers and toes called clubbing, which is intimately associated with fibroid change. I show you here the cast of a hand taken from life. The fingers are enormously expanded at the ends, somewhat like the "clubs" on playing cards. This is not merely a thinning of the upper parts of the fingers, which spares their extremities, but it is a new growth; it is, in fact, a growth of fibro-cellular tissue, and in some cases there is hypertrophy of the bones of the phalanges. You have here fibroid growth under your eye. Trousseau associated it with cyanosis and adherent pericardium, and so it is found; but in this hospital I have proved its connection with chronic phthisis and fibroid changes in the lung. It seems to be a result of lowered nutrition and imperfect arterialisation of blood, and a direct growth of fibro-cellular tissue. In 46 of my own

cases, 30 were in the cavity stage of phthisis, and only four in that form of diffused deposit scattered through the lung, and causing slight flattening only of the walls. It is, therefore, a character of chronic phthisis undergoing fibroid changes. Out of 2,430 cases of phthisis of all stages, 654 (or 27 per cent.) had clubbed fingers. Of these 29 per cent. were males, and 24 per. cent. were females. The observed *duration* of my cases while under observation was forty-five months, as compared with fifteen months, the duration (under observation) of ordinary phthisis. *Clubbing* is therefore a visible sign of chronicity.

For practical purposes let us note now the *conservative* effects of fibroid changes in the lung. They tend to contraction and induration, producing an inert condition of lung; they reduce the volume of one pleural cavity and contract any existing excavation. A reduction of the volume of blood, both of pulmonary and bronchial origin, circulating in the lung, is effected, and a reduction in the quantity of the entering and contained air ensues. There is less work for the lung to do in aerating the blood, and less movement of the lung itself. Why is lung-disease so serious, so fatal? Why does the system so suffer by irritative fever in lung affections? You will find the answer to this if you consider the constant movement, the double circulation, the enormous supply of blood, and the vital nature of the function of respiration. If you desired to give the lung rest, as you treat a wound, or a fractured limb, or an inflamed eye, you would stop or control all this movement, and lessen the supply of blood and of air. Fibroid change does precisely this. Nature might restore an ulcerated lung if rest were secured, especially when the cheesy matter had degenerated, dried up, or been expectorated. Suppose we could tie up a pulmonary artery, compress bronchial tubes, and limit the expansion of the lung and of the side, the ulcer would be reduced to the condition of a wound in the leg or a lymphatic abscess in the neck, and might heal. At all events Nature shows us the way, and we might second her attempts. You will often find benefit from bandaging the side or strapping it round, and so limiting the movements and circulation.

Study the effects of pressure on the lung, as in pleuritic effusion. Lung disease, if present, generally stops in a lung so compressed; and we occasionally witness in pneumothorax (if life be prolonged) the remarkable event that the ulcerative disease in the collapsed lung is suspended.

Thus fibroid is of varied origin; for out of all forms of lung disease become chronic, Nature tries a mode of escaping the worst results. In a scale of phthisis, the *worst* results are progressive ulceration of all tissues from apex to base; and the *best* results are limit of disease, clearing out of morbid products, narrowing of pulmonary space, and lessening of pulmonary requirements and of pulmonary circulation. Such objects are partially obtained by phthisis of fibroid form: not fibroid phthisis, or fibroid *wasting*, which is a contradiction; but fibroid formation counteracting waste, whether of lung or body.—*Lancet.*

The Simple Treatment of Quinsy, etc.—Leslie Thain, M.R.C.S., &c., writes: "For some time past I have been perplexed how to treat acute pharyngitis and tonsillitis. From having studied a rather extensive number of these common affections, I have come to the following conclusions:—Gargles of alum, tannic acid, and such similar astringents are usually valueless, and I am of opinion that it is easier to 'pull the bull by the horns than to push him by the rump.' Alum, &c., will *not* astringe the vessels sufficiently to 'press back' the inflammation. My plan is to apply externally hot fomentations (with a few drops of turpentine) to the throat, and then to wrap up the whole neck in flannel. Constant heat, moisture, and mild counter-irritation are to be kept up by frequent changing of these applications. The feet must be at once put in a hot mustard bath, and if the patient will then get into bed between blankets so much the better. Gargles as hot as can be borne must be begun as soon as possible, and the most useful is a watery solution of carbolic acid (1 in 40). It has a soothing effect on the inflamed mucous membrane, besides sweetening the foul breath. If gargling cannot be performed, carbolic acid in glycerine (1 in 20 or 30) should be frequently applied by means of a feather to the parts. A brisk saline aperient may be advisable. By following this plan of treatment the inflammation subsides in a few hours, never running on to suppuration, and then a simple alum gargle may be serviceable. The advantages of the plan are—1. The carbolic acid relieves pain, checks hawking and tickling of the throat, and sweetens the foul breath. 2. The glycerine keeps moist the dry, irritated mucous membrane. 3. The hot gargle fomentations and foot-bath rapidly relieve the active congestion."

TWO CASES OF APHASIA AND A CASE OF HYSTERICAL DUMBNESS OCCURRING IN CHILDREN.

BY JAMES FINLAYSON, M.D.,

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Aphasia with right hemiplegia is certainly rare in childhood. The two following are the only cases of hemiplegia in children, complicated with asphasia, which have come under my notice, although I have seen a considerable number of children affected, some with right and some with left-sided paralysis. These cases are further of interest as presenting a very unusual complication in scarlatina and pertussis; both children, likewise, had unilateral convulsions in connection with this paralysis. But the first case, which was under observation for a considerable time, presented several points of such interest in connection with the possibility of education in a young aphasic as to demand some special record in this respect.

APHASIA AND RIGHT HEMIPLEGIA IN SCARLATINAL DROPSY.

This boy, twelve years of age, was seen by me the day after his admission to the Western Infirmary (January 26, 1876). His condition as regards speech seemed so peculiar that a strong suspicion of deception could not fail to be entertained, notwithstanding his early age and his obvious paralysis. In reply to a question as to his name, he said quite plainly, "Malcolm;" on interrogating him as to his other name he seemed unable to mention it, but on trying various names he said "No" to them all, till the right one—McKay—was introduced, when he said "Ay." His whole vocabulary in ready use consisted of his name and "Ay" and "No." Even his surname was pronounced, after repeating it to him, only with difficulty, and scarcely quite distinctly. On trying him with the letters of the alphabet, he answered with remarkable promptitude, *but he was invariably wrong;* he usually called every letter "o" or "x" without hesitation. It caused no little surprise, therefore, to learn from the nurse that he could write his name; this he did at once when asked, writing in a somewhat straggling manner, but quite legibly, with his left hand. Tried with the letters he had himself written, he answered as glibly, but as wrongly, as before. Tried with names of things and with purely verbal requests (*e.g.*, to get out of bed and stand on the left foot), he was found to understand nearly everything said to him. It seemed quite clear that the boy was aphasic, and that his power of writing his name had been the result of a secondary and special education; subsequent inquiry bore this out completely. Printed letters on moveable tablets were tried next day, and he soon managed to spell out "Malcolm;" and when the letters composing his name were given, apart from the rest, he readily put "Malcolm McKay" together, but had much more difficulty if the whole boxful of letters were given; in such cases he often produced something having a resemblance to his name, but if the erroneous letter or letters were pointed out he could usually rectify the mistake. It was found, also, that he could arrange figures from one to nine in sequence, and even if some duplicates were given he arranged the figures correctly, leaving the others aside. He could also, by a little effort, be made to repeat the names of the figures in succession, as they were pointed to in order, but this seemed to be by rote; indeed, he repeated one, two, three, &c., when they were taken in reverse order, and he could not identify the figures by name any more than the letters. Tried with pictures, he showed clearly his knowledge of nearly everything; usually he imitated the cries of the animals—thus, a dog was "bow-wow." If, now, he were taught to say "dog," he could answer correctly, at the time, when the picture was pointed at; but, if fresh pictures were gone over, and the dog were again pointed to, he seemed readily to forget, and would again say "bow-bow." He clearly understood long sentences, and could repeat almost any word which was said to him; but, although he could say "please," "nurse," "an," "egg," word by word, he could not be got to put these four words together by any inducements. Tested with coloured objects, he could at once match the colours, as a red dress with a piece of red blotting-paper, when desired; but he had no knowledge of the *words* red,

blue, &c., so far as could be judged; he very quickly learned, however, from the errors he made, and could soon pick up the coloured objects asked for; fresh difficulties sometimes arose when articles of a different kind, although of the same colour, were substituted. After trials, repeated on several different days, he seemed to learn the colours pretty well by name; but, just before dismissal—a considerable interval having elapsed without any such trials—he was found as vague as ever, and gave black when asked for white.

Tested with writing to a copy, it was found that he could write very accurately any words set to him, and this, apparently, with equal facility, whether in English, German, or Latin; in attempting to copy German words from a book, he made a fair attempt to represent the marks over the modified vowels, although, of course, he must have been quite ignorant of their use. A Greek word (*ανηρ*) he also made an attempt at without, apparently, any hesitatation. In conducting these trials it was found that he copied capitals as capitals, but could scarcely be got to copy printed capitals into writing characters. On further and repeated attempts to teach him little words, it was found, during his residence in the ward, that he could be got to write little words to *dictation*, or to read them when written. Man, pig, cat, dog, horse, were among the words thus taught him. It was found that "man," written in writing characters, he knew, and could read and copy, but "MAN" (in capitals) he guessed as something else, although he made a fair copy of it in capitals; for "dog" he frequently wrote "day," but, if checked, he corrected the error; "homo" he guessed as "horse."

Experiments with coins brought out the fact of his knowing, to some extent, at least, their relative value; a halfpenny he called (as is common in Scotland) "ha'-p'ny," and a penny he seemed to call the same; but, it was noticed, that he then always repeated the word, and it became clear that he meant "ha'-p'ny, ha'-p'ny" to be a double halfpenny—*i.e.*, a penny. Before dismissal, when his knowledge of the names of coins had considerably improved, he could not name half-a-crown, but called it "shilling, shilling, sixpence."

Following up some hints obtained during the examination, he was tried with various compound words, but he did not succeed in naming objects thus designated. A watch-key he called a "watch," although, on questioning, he confessed it was not a watch, and supplemented this name by a gesture showing its use. An egg-cup he called an "egg," and so on, always admitting his wrong use of such words.

Singing was one of his accomplishments, and it was interesting to learn from his mother that it was in connection with singing that he began, first of all, to use any words after his illness. We found that he could start the songs himself, and he kept moderately well to the tune throughout. Most of the song was made up of simple sounds, but now and then two or three distinct words could be traced; indeed, in one hymn he sang—"Hold the Fort"—he slurred over very few of the words.

He was once seen in a rage at the nurse, who had interfered in some quarrel between him and another boy regarding a top; but, amidst all his indignation, he could not get beyond one word. When asked what was wrong, he said, "her" (pointing to the nurse), then "peerie" (a Scotch word for the top, and pointing at her pocket), and by-and-bye, in disgust and crying much, he kicked off his slippers and said "hame" (home). In this way, with single words and gestures, he usually made himself quite understood. All these facts acquired great significance when it was found that he had been, for his age, well advanced in school, and specimens of his writing, before his illness, and his school books testified to this. He had also learned at school to draw and to sing. Indeed, he seems to have been rather a clever boy, and even with his imperfect speech and defective education since his illness, he showed evidence of considerable sharpness and wit.

The history of his illness was briefly this. Fifteen months before admission he had scarlatina, not of a malignant type, followed by general dropsy and, as stated, inflammation of the kidneys, and, during this dropsy (about a month from the beginning of the fever), he was seized with convulsions, preceded for about an hour and a half by stupor. The convulsions affected the right side of the body exclusively;

they lasted, off and on, for about nine hours; some vomiting occurred in connection with this attack of convulsions. After the fits he lay unconscious for about nine days, passing everything in bed. The dropsy disappeared after this seizure, and he gradually improved in other respects also, but he was found, on recovering from his unconscious state, to have marked paralysis of the right side. This also improved greatly, but it was four months before he could walk. During this period of recovery he had several convulsive attacks, differing from the first in being general, and not unilateral; one of the worst of these attacks had occurred a month before admission. After the unilateral convulsions, which ushered in the hemiplegia, his mother states that there were blindness and deafness as well as loss of speech. The sight and hearing seemed to improve along with the power of walking, and are now natural, or nearly so. No otorrhœa existed at any time. About the same time that the power of walking returned, he began to use the phrase, "'Deed no," but this phrase his mother regarded as a "rhyme," apart from any meaning. He indicated assent and dissent by movements of the head. His mother thinks that it had only been for about three or four months before admission that he could understand words addressed to him; when asked to bring anything before that time, he stood still and seemed stupid, and only knew what was wanted when it was pointed at. Attempts were persistently made by the family to teach him, and he can now name a large number of objects when they are shown to him, but, so far as can be made out, this knowledge of words has all been the result of a secondary education; they also taught him to write his name to a copy, and (vaguely) made efforts to overcome his defect by the use of the finger alphabet used by the dumb. Since his illness he has become more passionate and irritable than formerly, and has destroyed many of his books and toys. Prior to his illness he had been subject to headaches, but these have left him since then.

Examination of the boy, on admission, showed a considerable paralysis of the right arm (without rigidity), and a very slight paralysis of the right leg, but no distinct paralysis of the face, and no affection of the cranial nerves, so far as could be made out. Dr. Reid kindly examined the eyes with the ophthalmoscope, but nothing special was detected. The heart seemed perfectly normal, as also the urine, which was frequently examined. The general condition during his residence in the wards for two months, was excellent, and no convulsions occurred.

His progress, on the whole, was small. Faradization was regularly used for the arm, and he was encouraged to use it, and by-and-bye he could write a little with his right hand. He learned, also, as stated, to write some words to dictation, and he could also put a few words together, little phrases, such as, "Good morning, sir;" as a result of training by the nurses, he frequently corrected "Ay" into "Yes, sir;" he could also latterly write figures correctly up to twenty, but his knowledge of figures remained very limited; if asked how much the figure 6 represented, he would hold up six fingers; if urged to name it, he might count 1, 2, 3, 4, 5, 6, and then, if asked how much, he might answer, "seven;" with certain figures, however, he was, at times, correct.

It seemed very plain that, with such an intelligent lad, and with the history given, much might be done in the way of education, and the experience in the ward confirmed this. He seemed, in many respects, to resemble a child learning words and figures for the first time, making the same kind of mistakes, and having the same tendency to forget rapidly. It occurred to me, therefore, and to Dr. Gairdner and Dr. Yellowlees, who examined the case also, that the Asylum and School for Imbecile Children at Larbert would be a fitting place for the education of such a one to be begun afresh, as the parents were too poor to have skilled instruction, adapted for his mental state, provided at home; a representation to this effect was made by me to the directors, but although the case seemed much more hopeful than that of one with a congenital defect, they seemed to have some doubts and difficulties in the matter, and declined to place him on the list. In this connection a speculation of Dr. Gairdner's, published some years ago in his paper on Aphasia,

may be mentioned—viz., that certain cases of imbecility or idiocy may be due to an affection of the organ of language in early life, before it can show itself by loss of speech, and that this loss of language, by preventing education, may be the cause of imbecility in some children.

APHASIA AND RIGHT HEMIPLEGIA IN PERTUSSIS.

Aphasia and hemiplegia, complicating whooping-cough, are certainly very unusual, and, so far as I am aware, no case of this kind has been published. I was asked by Dr. G. R. Allan, on March 5th, 1876, to see a girl seven years of age. There was whooping-cough in the family, and this child had been kept from school on February 25th, on account of cough and vomiting. In three days the child was evidently worse, and vomited much, and Dr. Allan saw her on the following day, and prescribed regulation of her diet, and some medicine for the stomach and bowels, with apparent benefit. On March 3rd, right-sided paralysis was detected, and the only words the child said were, "Ma—ma:" she was very restless, and complained of pain about the left temple. On March 5th I found a very marked paralysis of the right arm, which she lifted and nursed with the other hand, and a slight paralysis of the right cheek: the paralysis of the right leg was, apparently, passing away. She understood words, and tried to give her powerless arm when it was asked for; she distinguished pictures shown to her, and pointed out things when they were asked for, but she only said, "Ma—ma;" she made, however, some attempt at "Yes." The case was at once recognized as aphasia. Hydrocyanic acid was ordered for the cough, the hair to be shortened, and the head kept cool. Next morning a little improvement in the arm was noticed, and she could now say "Davie" (her brother's name), and "Ma's lamb" (a pet name for herself). Early in this morning her mother had noticed some twitching of the right arm, and there was some vomiting, but, in the evening, violent convulsions, affecting the right side, supervened, and the conjunctivæ were much suffused. The convulsion had continued for about half an hour, when Dr. Allan arrived and administered chloroform, under which the convulsion ceased The hair, which had previously been shortened, was now shaved off, and bromide of potassium and chloral were given in moderate doses every three or four hours. There was no recurrence of the convulsion, but next day she was still very poorly, very thirsty, and her tongue much coated.

On March 8th Dr. Allan, in his notes, which he has kindly supplied to me, states that she tried to speak, saying, "Yes," "Maggie," "read," quite plainly; when any object in the room was pointed at, and she was asked its name, she tried to answer, but only said "Yes," or "Maggie," or "Ma—ma," and seemed annoyed at her failure. Next day a distinct improvement in speech was noticed; although she could not name the letters of the alphabet when pointed out, she could repeat them when named, and the power in her arm had likewise improved. On March 12th I saw her again; the paralysis had almost passed away, and she could name most of the objects and letters with which she had been tried during the last few days. Some, however (as comb and brush), she could not name, but she showed by signs that she knew their use, and when told their names seldom made a mistake again. Tested with colours, she seemed much puzzled, although she knew them before her illness, and called red blue, and yellow green. Although immensely improved, there was an abnormal irritability about her, and her parents were advised not to tease her much with attempts at naming objects. From this time her improvement became very rapid, and when I saw her for the third time on May 23rd, there was no trace either of paralysis or aphasia, and only a very slightly greater childishness in her manner than one might expect at her age. It is worthy of remark that the whooping-cough was never very severe in this case, and in particular none of those alarming paroxysms occurred which we often see. The onset of the paralysis and the aphasia *before* the unilateral convulsions, formed a contrast to the case of the boy just detailed, and the rapid recovery no doubt pointed to a less serious lesion of the brain. There was no affection of the heart, and the urine was not albuminous.

Hysterical Dumbness in a Child.

Very different from the preceding, although also unusual in one so young, was the case of a girl, ten and a half years old, who came from Ayr, and was admitted to my ward at the Western Infirmary. There was no nervous tendency made out in the family history, except in the case of her mother, who had died of phthisis, but who had also been subject to hysterical seizures, which assumed the form of swoons. This child had, of course, never menstruated, but had been in good health till the end of February, 1876, ten weeks before her admission. Although never an anxious scholar, she had been apparently agitated regarding some school examination, and two days after, on returning from church, she had a nervous attack, throwing herself about, and striking at the walls and her friends, &c. This passed off in three days; during this time she ate but little, she did not speak, and was supposed not to hear. Four weeks later she had a similar attack, also lasting three days, but less violent. Since then she had had several attacks, lasting for a day, with much less violence, but associated, as the friends thought, with absolute deafness as well as dumbness; these always passed away after a night's rest. But on April 28th such an attack came on, and as it had lasted for a week, she was brought to the Infirmary on May 4th, still affected in the same way. Her manner presented a combination of the restless and prying disposition often seen in slightly idiotic children, with great violence and excitement when crossed. Thus, she had been prying about the wards, apparently quite interested in everything, but when her father was preparing to leave her she clutched at him and screamed in the most violent way: when he was away she became almost at once quite quiet and tractable as before. Next day she answered on a slate several questions written down for her, doing this with great apparent interest. It could not quite certainly be made out whether she could hear or not, but my impression was that she did hear.

An attempt was made the day after admission to try to get her to speak, by writing the word down and speaking it loudly into her ear, and making her imitate it again and again till she came near the sound. In this way she uttered some sounds, which could occasionally be recognized as words. Nothing abnormal was found in her physical condition, on careful examination, except opacities of the cornea, for which she had been under treatment for some time. After we had completed the examination of the heart, liver, &c., and while the patient was in bed, the nurse had kissed her in desiring her to lie still, and considerable amusement was caused by the child's eagerness to kiss the students all round. The treatment (in addition to the attempt at teaching her to speak) consisted at first in continuing the ten-grain dose of bromide of potassium at night, which she had been getting at home, and on the day after admission she had a scammony purge.

Next morning when she awoke she said to the night nurse, "Good morning," and at the visit, an hour or two later, she spoke freely in answer to questions, and seemed quite different in her manner. She also read some pieces of verse, and recited a few lines of poetry from memory. No return of this affection occurred during her month's stay in the ward. It was proposed to keep her for another month away from home influences, which, it was feared, had not been favourable for her, but she had one or two slight febrile attacks, one of them with sore throat, and one whose cause was obscure, and her friends removed her to Ayr during my absence from duty at the Infirmary. I learned subsequently, however, that she had continued well and free from the nervous attacks.—*Obstetrical Journal.*

B., C., & F. says, in reply to the letter of "A Student" which appeared in the last issue, we beg to state the following:—1 part of salicylic acid is soluble only in 300 parts of water (15° R.), 4 to 5 parts alcohol, 50 parts hot oil or glycerine. In adding water to an alcoholic solution, of course solid salicylic acid will be set free in proportion to the reduction of the alcohol; and to dissolve this excess of salicylic acid that has been set free, another addition of alcohol or a proportionate quantity of water will be necessary.—*Lancet.*

IMPORTANT TO EXAMINERS OF LIFE INSURANCE.

DR. THEODORE PARKER'S

Limit Table of Weights and Measurements.

Limit of underweight, 25 per cent. Limit of overweight, 45 per cent.

Height.	Chest.	Standard weight.	25 per ct. under weight.	45 per ct. over weight.
5 ft.	33½ in	115 lbs.	92 lbs	167 lbs
5 " 1	in 34 "	120 "	96 "	174 "
5 " 2	" 35 "	125 "	100 "	181½ "
5 " 3	" 36 "	130 "	104 "	188½ "
5 " 4	" 36½ "	135 "	108 "	195 "
5 " 5	" 37 "	140 "	112 "	203 "
5 " 6	" 37½ "	143 "	114 "	207 "
5 " 7	" 38 "	145 "	116 "	210 "
5 " 8	" 38½ "	148 "	119⅕ "	215 "
5 " 9	" 39 "	155 "	124 "	224½ "
5 "10	" 39½ "	160 "	128 "	232 "
5 "11	" 40½ "	165 "	132 "	239 "
6 "	41 "	170 "	136 "	246 "
6 " 1	" 41½ "	175 "	140 "	254 "

The Doctor says this table was constructed by him seven years ago, as a guide in his company, the Globe Mutual Life, of this city, and experience has confirmed its value, as a rule that applicants 25 per cent. under standard weight and 45 per cent. over are not safe cases for insurance at regular rates.

As a limit, therefore, of under and overweight, it will aid the examiner in forming an opinion of the safety of the risk for his company. Twenty-five per cent. *under-weight* is the loss of one-fourth of the man, and calls for the most searching investigation on the part of the examiner. These light weight cases may be the result of chronic dyspepsia, diarrhœa or dysentery, marasmus, scrofula, hæmorrhoids, (bleeding), hypertrophy of the heart, with excessive impulse, albuminurea, Bright's disease. In addition to these, in the case of females, some chronic uterine disease may be suspected. The exceptions are few in which it is safe to disregard these limits, and in every such case of under-weight tests for Bright's disease and other obscure organic mischief are imperatively indicated. In this connection will be seen the importance of being accurate in stating the height and weight. Mistakes might cause the rejection by the Home Office of a good risk, or the acceptance of a bad one.

ETIOLOGY OF ANGINA PECTORIS.

According to G. See (*Berlin. Klin. Wochens.*: from *La France Med.*, 1876, No. 26, et seq.), angina pectoris is not dependent upon a peculiar neurosis, but upon ischæmia of the heart. As original causes may be mentioned mechanical changes in the coronary arteries in connection with degeneration of the cardiac muscular tissue, and dilatation of the cardiac cavity. By this means the coronary arteries are insufficiently nourished, and at the same time an insufficient supply of blood is brought to the heart. Occasionally, but much less frequently, purely functional disturbances in the coronary arteries are the cause, as in coughing, hysteria, etc. Actual organic lesions are, however, most usually at fault. By this ischæmia of the heart, See explains all the symptoms, as well as the cause of death. When the myocardia and, at the same time, the nerve-terminations are supplied with too little blood, pain will be caused simply from this anæmia, and this is the origin of the agony. This irritation of the sensitive nerves excites reflexly the motor twigs of the vagus, which induces slowness of pulse towards the end of the attack, with the concluding interruption of cardiac contraction. Later, exhaustion of the vagus occurs, and following this the final acceleration of the pulse which is observed. The painful irradiations into the shoulder and arm, as well as into other parts of the body, are explained by See as the result of transmission from the nerves originally irritated to various other sensitive nerves. As remedies, See recommends strongly subcutaneous injections of morphia or enema a of hydrate of chloral to the amount of two or three grammes (30 to 45 grains). Liquor ammon. acetat., diluted with an equal quantity of water, six to eight gram. (f℥ss ad f℥ii), is sometimes of service. See has had no experience with nitrite of amyl. In the intervals, he recommends bromide of potassium, digitalis, rest, and hygiene.—*Medical Times.*

Dr. E. H. Pratt, of Wheaton, Ill., recently reported to a Homœopathic Medical Society the case of "a mother who had given birth to a child with a small Homœopathic pill in its throat, which had been occasioned by another child having swallowed a number of little pills, which frightened the mother during pregnancy!"

Surgery.

ON INTERNAL SKIN DISEASES.

BY T. CLIFFORD ALLBUTT, M.A., M.D., CANTAB., F.L.S., ETC.,

Physician to the General Infirmary, Leeds, England, etc.

It is in no spirit of mere paradox that I venture such a title to my present paper as the "Internal Skin Diseases." Certainly I am making use of language a little beside the line of common usage and opinion; and if by so doing I strike the reader's attention, I shall not be sorry; but by diseases of the internal skin I mean certain affections which may strictly be so called, and which have been so neglected or unknown that a new name for them is not without its advantages. To those who have some knowledge of the German tongue my title will seem less peculiar. In that language almost the same name is given to the external and internal teguments—that is to the skin proper—and to the mucous membrane; and if we spoke of the former as the skin and of the latter as the "slime-skin," and if we bore in mind that the two teguments have most natural affinity and a like developement, we should be the more ready to remember that they may be subject to similar or identical changes in disease, or to changes only modified by the accidents of their surroundings.

It is the evil of specialism, that such wider views of the relations between distant and superficially unlike changes gain no ground; but, on the whole, specialism is good, in so far, and so far only, as the whole profession assimilates the knowledge gained by specialists, in so far, that is, as the medical public at large will read the Archives of Dermatology. As a specialist, indeed, I have no right to speak. Skin diseases form but a small part of my practice as a physician. Nevertheless, I have always felt an attraction to this part of medical science; as, in skin diseases alone, we can watch closely and can compare the varieties of morbid change, and can combine accurate observations of outside changes with careful inference as to those within. For instance, we can scarcely conceive of ourselves as speaking of all cutaneous inflammations simply as dermatitis. We know that there is an eczema, a psoriasis, an acne, an erysipelas, and many other things which are all dermatitis, and we have accustomed ourselves to expect the higher accuracy. But we are quite content to speak of bronchitis as a sufficiently descriptive term, forgetting that the inflammations of the bronchial skin may be as various in their character as those of the outer tegument. But we cannot see them; nor does it seem to occur to any one to endeavour to see or distinguish them by the eye or reason. Yet a study of external dermatitis, in all its varieties, may give us fair ground for inference concerning the possible varieties of internal dermatitis, of bronchitis or enteritis. Fortunately we have some help in the visible parts of the mucous membrane; and the mouth is known to have its varieties of stomatitis, its herpes, its psoriasis, and its parasitic diseases.

It may be well, therefore, for me to prompt inquiry somewhat farther in the same direction. I say to prompt inquiry; for I will not pretend now to give a full account, or to attempt a full account, of all that can be included under the present title of my paper. Psoriasis of the tongue, for instance, is sufficiently well known, and so is herpes of the lips and mucous lining of the mouth. This latter, however, is not recognized as fully as it might be. Many persons are terrible martyrs to it; as it will return with great obstinacy, many times a year for many years, causing great suffering, and interfering with the power of masticating food. One lady, now under my care, has had this recurrent affection for twenty or thirty years, and her daughter is subject to external psoriasis. Arsenic relieves both patients—the mother a little, and the daughter more. Buccal herpes is, however, as yet in any permanent sense, almost incurable. Another rather common affection is what I believe to be eczema of the bronchial tubes. Now here I may say, that I use the word eczema with a good deal of hesitation, as I am unable to describe the precise characters of the eruptions. After death, it is well known that the character of all moist diseases is much changed, and it is then only that we can examine the state I call bronchial eczema. Moreover, this state is fortunately free

from much danger to life, and examinations of it *post mortem* must be rare. The affection of which I speak, however, seems to be eczematous rather than herpetic, or of the character of psoriasis, because it is not so fugitive as herpes, nor is it attended with the evacuation of shreds, as is the case with psoriasis of the colon. Bronchial eczema may be distinguished from common bronchial catarrh partly by its symptoms and partly by its occurrence in persons otherwise known to be liable to such diseases externally. On the other hand, it must be distinguished from that pure asthma, to which, among other neuroses, persons of a dartrous diathesis are obnoxious. Eczematoid bronchitis causes the following symptoms :—

1. There is much wheezing, and asthmatic oppression and cough.

2. Very variable expectoration, never becoming purulent, generally scanty and frothy, but sometimes more profuse and glairy ; there is occasionally streaky hæmoptysis.

3. The physical signs are confined to the larger tubes, and consist chiefly of sibilant râles.

4. There is little or no tendency to cardiac or other complications.

5. It defies all ordinary treatment, and advances and recedes unaccountably.

6. It is somewhat relievable, but not curable, by change of climate ; and it prevails at all seasons ; sometimes even in midsummer. It may recede on the outbreak of external eczema.

7. It occurs at all ages. My youngest patient at present is a child aged two, and my oldest a married lady aged about fifty-eight.

8. The disturbance of general health and nutrition is slight, except in so far this may be due to sleeplessness, etc.

This distressing affection, if rebellious to those general means which improve the secretions, is often ameliorated by arsenic, being about as amenable to that drug as is external eczema. In some cases, the drug answers wonderfully, in other cases less readily. The so-called gouty bronchitis is probably eczematous also ; but, like external gouty eczema, it somewhat differs in development from the dartrous form which I have described above. Gouty bronchitis is too well known to need further distinction. It does not yield to arsenic, but to the remedies appropriate to gout.

Psoriasis, I believe, occurs very rarely if ever in the bronchial tubes, and prefers the tongue and colon. Psoriasis of the colon has been often described under the name of "membranous enteritis"* (Da Costa), "mucous disease"† (Whitehead), "enteritis pellicularis," "enteritis pseudo-membranacea" (Cruveilhier), and so on.

This disease is marked by attacks of uneasiness, heat, irritability or even of positive pain in the abdomen, with irritability of the bowels, and the evacuation of shreds of membrane, or even of casts of the intestine, though this I have not myself seen. This ailment is recurrent and capricious—coming on for a time, receding or disappearing, and again returning, in the way that we observe to be the case in external psoriasis. In some inveterate cases (as in one lately under my care), the condition becomes chronic, if not permanent. During the intervals the patient is quite well. There are no feverish symptoms present at any time. It occurs generally in adults ; the youngest patient I have had was a young lady of some twenty years, and the oldest a lady of advanced middle life. These cases I shall refer to again. It is more common in women, but is by no means confined to that sex. Now, although this affection has been described repeatedly, and was known to Van Swieten if not to Celsus (Whitehead), yet I believe that, in this paper, its true character is first recognized. In most of my cases, it has actually been associated with external psoriasis ; but where so associated, it is usually but slightly developed ; so that, without inquiry, it may easily be overlooked. Any admission of abdominal uneasiness in the subjects of psoriasis, therefore, should lead to an inspection of the close-stool, when the motions will often be found to contain membranous shreds, and even slimy matter. Such patients, when questioned, will speak of variable and recurrent tumidity and uneasiness in the abdomen. Their bowels are irregular, often constipated,

* Amer. Journal Medical Science, Oct., 1871.

† British Medical Journal, Feb., 1871.

have often found arsenic and pitch the most successful; and I believe that a course of the sulphur waters at Harrogate is likely to answer, in severe cases, as it does in external psoriasis. The lady, Mrs. C——, whose case I promised to refer to again, was the case by which my eyes were first opened to the nature of "membranous enteritis." She has been under my care for many years, for very obstinate external psoriasis, and some time ago she told me (after taking a course of pitch pills, which had been of great benefit to her), that the remedies which answered for her psoriasis succeeded also in removing an irritation of the bowels, to which she had been long subject, but which was thrown into the shade by her more obvious and annoying external malady. On examination, I found that she was decidedly the subject of the so-called membranous enteritis; and I found that, by arsenic or the daily use of thirty grains of pitch, the bowel disorder could be kept under. Finally, I may add that such patients often have buccal eruptions. One of mine had also lingual psoriasis: and in several others I have noted eczematous or herpetic conditions of the mouth.

But my limits warn me that I must not attempt to pursue these interesting inquiries too far, but that my paper must, on this occasion, be rather suggestive than comprehensive. Of the syphilides which occur in the mouth and throat, I need not speak, nor of the scrofulides; unless it be to refer to those painless ulcerations on the back of the pharynx and soft palate, and even on the epiglottis, which are generally covered with foul, yellowish secretion, which are sluggish and ultimately heal with scars or even with much loss of substance, and which are only to be cured by anti-scrofulous treatment.

Did space permit, however, I could lead the reader to think of many affections of the mucous membrane, or internal skin, which are special in their nature and features. Affections of the internal ear are often dartrous and curable by arsenic; so again there is a special kind, catarrh of the stomach, attended with gastrodynia and catarrhal vomiting, or pyrosis, which I believe to be eczematous, and which is certainly often cured by arsenic. It was but the other day again that a father brought to me his son aged about eight years, who appeared to suffer from some rectal irritation, and in whose rectum I found, on specular examination, a plentiful crop of minute superficial ulcerations set upon a moist red membrane; which state of things almost declared itself, at a glance to be eczema. I trust, however, that instances of "internal skin diseases" may now be collected by others, who, by my observations, may be led to watch for such manifestations in their own practice. I need not stay to persuade the reader that such observations are no mere curiosities or strained analogies; on the contrary, if my words be true, a line of promising treatment will be opened up, not only for such intractable diseases as "membranous enteritis," but for many other affections of a slighter or of an equally obstinate kind; and in the classification of such cases, we shall advance to more and more accurate conceptions of those diathetic affinities of diseases, which conceptions lie at the root of successful therapeutics.—*Archives of Dermatology.*

Two Cases of Compound Fracture of the Leg. (*British Medical Journal*, September 30, 1876.)—In the University College Hospital two cases of compound fracture of the leg were treated in the same ward and at the same time by Mr. Christopher Heath, one on the antiseptic plan, the other by the open method. In the first case the wound was a small one, and was treated antiseptically from the first with very good results. In the second and older patient the fracture became compound, as the result of a fit of delirium tremens, and the bones became so displaced that Mr. Heath found it necessary to remove a portion of the tibia with the saw in order to effect reduction. This patient made a good recovery, with a wound dressed with oakum, so as to absorb all discharges, and was sent out with the fractures firmly united. The daily temperature was carefully taken in both cases; and it is remarkable that, notwithstanding the greater severity of the injury in the second case and the open condition of the wound, the temperature was on the average no higher than that of the antiseptic case.—*Phil. Med. Times.*

ITINERANT PILE-SURGEONS AND THEIR SECRET.

BY EDMUND ANDREWS, A.M., M.D.

Professor of Surgery in Chicago Medical College.

A number of men are itinerating in Illinois and the adjacent States, and treating hæmorrhoids by a new method. The secret has been sold to various physicians and other persons, at prices varying from fifty to twelve hundred dollars, and some of the purchasers have left a good practice in the expectation of making a fortune by travelling about and applying the remedy.

The itinerants usually claim to proceed without any operative measures, but a highly intelligent physician of this State, who investigated the matter somewhat, satisfied himself that a hypodermic syringe was used, but was not certain about the fluid injection.

Subsequent investigation has placed the plan more fully in my possession, and I give it here for the benefit of all concerned.

The first thing is to have a good hypodermic syringe, kept in perfect order, with sharp, delicate pipes. The fluid used is strong carbolic acid dissolved in any bland fixed oil. The proportions are usually as follows:

℞ Crystalized carbolic acid ..... ʒ iij
Pure oil .....f. ʒ i.
Mix.

Some of the itinerants use equal parts of the two ingredients, and some of them substitute glycerine instead of oil, and at least one of them has tried a preparation of ergot.

When the piles are internal, and not readily brought down, a Sims' speculum is employed to uncover them. The operator generally takes only one pile at a time, always selecting the uppermost first, and injects into its interior from four to six drops of the carbolized oil, or rather the oleized carbolic acid. The injection turns the pile white, probably coagulates the blood in its vessels, and results in its shrinking away without the inflammation being severe enough at any one time, as a general thing, to prevent the patient from attending to his business. The well-known power of carbolic acid to act as a local anæsthetic, antiphlogistic and antisuppurative, favours the progress. When the irritation of the first injection has measurably subsided, another pile is attacked in the same way, and, as the patient cannot see the syringe, he supposes that he has not been subjected to any "operation," which is a great satisfaction to him. The itinerant often call their plan "painless," but it proves in some persons atrociously distressing. The result is, in many other cases, excellent, so that the plan may turn out to be worthy of a permanent place in the treatment of hæmorrhoids.

However, the question whether it is perfectly safe has yet to be decided. In some instances these itinerants have gotten into an alarm at the condition of their patients, and begged earnestly for advice from men who knew more of surgery than themselves, but I have not yet heard of any actual deaths.

The injection of coagulating fluids into enlarged veins in other parts of the body has been extensively tested, the article used generally being tincture of iron. Maisonneuve, of Paris, practised this class of injections, in a great number of cases, with success; but as experience increased, dangers were discovered, and a number of patients have almost instantly died under the operation. The mode of death is supposed to have been this: Drops of the coagulating fluid, thrown into an enlarged vein, may become covered with a thin pelicle of coagulum, and in that state be swept on into the heart, where, by the bursting of the pellicle, the fluid is diffused, and a large coagulum may be instantly formed, and death by embolism occur.

If anything analagous should result from the injection of the carbolic acid and oil into the hæmorrhoidal veins, death would not be likely to occur suddenly, because these veins terminate in the portal system, and, therefore, any encapsuled globules or floating coagula would be arrested in their passage by the capillaries of the liver. Whether the clots thus lodged in the liver would, when large, fatally obstruct the portal vein, and, when small, produce hepatitis and hepatic abscess, is a question which cannot, at present, be answered. It is to be desired that physicians should carefully note whether any dangerous hepatic complications are developed after this method of treating piles, and, if so, to report at once to the journals. Honest

surgeons will not, at present, perhaps, feel justified in risking it, but these rather reckless itinerants will probably test the matter extensively, and it is our duty to observe the results. If the danger of embolism proves to be practically nothing, there is, probably, little else to be feared, and the operation may be a valuable addition to our resources.—*Chicago Medical Journal.*

Extraction of Foreign Bodies from the Ear.—Mr. George P. Field refers to the case of a little girl, æt. 6, who presented herself with a black glass bead the size of a large pea in her left ear. Previously, however, several attempts had been made to extract the bead; but, unfortunately, the mischief was only increased, the bead having been pushed in still deeper, and firmly imbedded, the result of subsequent inflammation. The ear was syringed gently, and any further attempt at removal was postponed, as there was a good deal of inflammation for a few days. She was, however, laid up with chicken-pox for two months; and when she came again to the hospital all inflammatory signs had disappeared, but the bead could easily be distinguished with the speculum, deeply seated and firmly fixed. She was put under chloroform, and an attempt was made to remove it by means of glue attached to the end of a piece of stick. This failed altogether. She was, therefore, placed on her side, with the affected ear downwards, and the syringe used from below; and, after a little trouble, the bead dropped out. This is a case that one is likely to meet with almost every day. A great deal more harm than good is often done by the use of instruments; but by the following method no injury can be caused. Place the patient under chloroform, with the ear affected downwards, and syringe from below. Pull the auricle backwards and upwards (by this means the external auditory meatus is made into a straight tube), and apply the nozzle of the syringe to the upper wall of the passage. The water is then gently forced behind the obstruction; the foreign body is loosened, and its own weight will cause it to fall out of the ear.—*The British Medical Journal.*

ADMINISTRATION OF CHLOROFORM.

Prof. Geo. H. B. Macleod, F. R. S. E., of Scotland, in a lecture to students, urges the grave responsibility of the person who administers chloroform—the anæsthetic so extensively and successfully used in that country—and says: "Every time it is administered a certain menace is directed against the life of a fellow creature, and it is only by the utmost attention to certain rules that safety is secured." He has not had an accident from its use in an active surgical career of over twenty years. He regards it as a good surgeon does a very sharp instrument—a splendid thing when directed by skill and intelligence, but bad in the hands of children. He regards it as being much safer than ether, and believes that death occurs from culpable negligence in its administration as in many cases from the shock of the operation for which it was given, the patient not being sufficiently under its influence. No examination of the patient for cardiac or other affections is required, for if the patient is fit for the operation he is fit for chloroform. "We recognize almost no disease as rendering a patient an unfit subject for chloroform." Heart disease is often alleviated by its employment, the chief danger being from shock in consequence of incomplete anæsthesia.

No person should be charged with any other duty when he is asked to administer chloroform, for many deaths have resulted from neglecting this rule. The state of the patient is ever changing, and these alterations must be watched and guided, a duty sufficient for any one.

Before administering the anæsthetic care should be taken to have ready at hand artery forceps to pull the tongue forward, cold water to dash on the face and chest in case of syncope, a kettle of hot water, a bowl, and a sponge large enough to fill the bowl. In Nelaton's method the bowl and sponge can be filled with hot water and the head placed in it. This usually acts very rapidly. There should also be some aromat. spts. ammonia and brandy. Soft cloths for discharges from the mouth, a chair to sit in, and a ready means of admitting fresh air.

The chloroform should be pure and the pa-

tient prepared by a purgative the previous day, no solid food for three hours, and one or two teaspoonsful of brandy just before the chloroform. No examination of the chest, or other procedure calculated to disturb the patient, should be permitted. A towel is the best inhaler, and the fore part of the day the best time.

The patient should be in a recumbent position, with clothes loose, head low, comfortably but not heavily covered, and false teeth removed. No instruments should be laid on the patient, and crowding around of bystanders avoided. The patient should close his eyes and breathe naturally.

The anæsthetic should be continued till it annuls intelligence, voluntary motion, sensation and reflex action, or danger from shock may be apprehended. Touching the eyeball, or irritating the diseased part, may serve as a guide to the completeness of the anæsthesia. On the appearance of pallor, draw the tongue forward, lower the head, (Nealton's method), dash cold water on the face and chest, and induce artificial respiration.

As the anæsthesia passes off, a few sharp slaps will arouse the patient sufficiently to take some strong and warm tea—one of the best restoratives—when the patient should be placed, warmly covered, in a well-aired, dark room to sleep. With careful attention to these and similar rules, there can be very little danger in administering this potent agent.—*Peninsular Med. Jour.*

TREATMENT OF LESIONS OF THE MEMBRANA TYMPANI.

Dr. J. P. Cassells observes that in every case of lesion of the membrana tympani the following points demand attention. 1. The history of the case. 2. The site of the lesion. 3. Its form. 4. Its appearance; and 5. The results of auscultation. After discussing each of these points separately, he states that in the treatment of such cases he has always regarded the tinnitus aurium as indicative of congestion of the vessels of the inner ear, and the damping of the tone-perception as caused by their pressure upon the minute nerve fibres in the cochlea. Complete non-perception of the tones, however, may exist from the outset, with or without tinnitus; in either case there is paralysis of the cochlear division of the auditory nerve. Holding this view of the pathology of labyrinthine shock, he usually, in the treatment of cases in which the tinnitus is intense and the tone-perception dulled, endeavours to lessen the congestion of this part of the ear by the local abstraction of blood, free purgation by salines, and mustard pediluvia. These measures, coupled with mental and physical rest, have hitherto yielded him good results. In some cases, however, they have failed to afford complete relief to all the symptoms, especially the tinnitus. Where this has been the case, he has had reasonable grounds for suspecting that some inflammatory products had been effused. In such instances the prolonged use of the perchloride of mercury (best given in the tincture of bark of the Edinburgh Pharmacopœia) has afforded satisfactory results. If from the outset of the case there is an entire absence of this symptom, or any other sign of active congestion of the labyrinth, the constant current may be used in the manner directed by Rudolph Brenner, with a fair hope of restoring the normal perception of tones, and of removing the deafness to articulate speech. In many cases nature, unaided by art, is capable of effecting a cure.—*The Practitioner.*

In the London *Lancet*, for October 21st, is a report by A. M. McAldowie, M.B., House Surgeon to the Royal Surrey County Hospital, of a case of "primary cancer of the lungs in a child five and a half months old "occuring in the Hospital. The lungs were infiltrated with hard white nodules varying in size from a millet seed to half an inch in diameter. "The pulmonary tissue surrounding the cancerous masses was quite healthy. The bronchial glands were enlarged, hard, and infiltrated. The brain, liver, kidneys, and all the other organs appeared to be quite healthy." There was a total absence of physical signs of the disease; but a slight, short, dry cough was present, together with great emaciation and fretfulness. There was no history of phthisis or cancer in the family. Some malignant affection was suspected, but a diagnosis was not made *ante mortem.*

Midwifery.

PESSARIES.

At a recent meeting of the Société de Thérapeutique (*Gaz. Hebd.*, July 17), Dr. Garral presented a new pessary, which he termed the "flat ring elastic pessary." He had found that ring pessaries with rounded edges, brought in contact with the internal surface of the vagina, do not always admit of exact application over a sufficient extent of surface, and are liable to glide away. The ring, moreover, is liable to assume the vertical position, instead of remaining horizontal, and thus to present its upper portion to the os uteri. To remedy these inconveniences, M. Garral has had elastic ring pessaries constructed which are flat, light, and of small size. They are lighter and less thick than the old rings, and possess, on this account, a double advantage. Being more raised, they compel a reflexion of the vagina towards the uterus, so that this canal loses so much of its length, maintaining the organ more in its physiological position. The flat rings being more hollowed out than the round, the os uteri has more space for its lodgment, especially when enlarged. These rings are easily elongated by compression at opposite points of their circumference, rendering their introduction easy by the patients themselves.

M. Delioux stated that he was of opinion that the cases are very few in which pessaries are required, and he could only understand their utility when there is an enormous prolapsus uteri with eversion of the vulva. As a general rule, their utility is very dubious, and M. Delioux mentioned that Dr. Guéneau de Mussy is very much of his opinion, preferring sponges hollowed out in shape of mushrooms. M. Delioux himself prefers a simple plug of pretty firm wadding. With this, a well-made hypogastric belt, and injection of tannin or alum, the walls of the vagina contract so as to hold the uterus. As engorgement of the cervix uteri is the chief cause of the prolapsus, it is to the treatment of this our attention should be chiefly directed. MM. Créquy and Dujardin-Beaumetz have both found this new pessary to act admirably. M. Moutard-Martin shared M. Delioux's scepticism as to the utility of pessaries; and the fact that this new one is stated to be capable of retention for a long time is, in his opinion, a bad feature, likely to give rise to the production of ulcerations and vegetations. For many years past he has employed little bags of muslin, three or four centimetres long, equal in size to three fingers joined together. These are incompletely filled with linseed meal and some powder of oak bark, and dipped in tepid water immediately before introduction. As a long thread is attached which hangs out beyond the vulva, the patient herself passes in a new bag every morning and removes it in the evening. M. Vigié stated that he had prepared for M. Guéneau de Mussy, in order to prevent the sponges he uses becoming putrefied, sponges soaked in paraffine. M. Delioux sees no advantage in this, as the pessary or plug (which always should be introduced by the practitioner himself with the aid of Fergusson's speculum) should be changed morning and evening, or, in case of necessity, at most at the end of two or three days. M. C. Paul believes that this pessary of M. Garral possesses certain advantages —its breadth allowing the uterus to enter completely within it, and to remain suspended, so to say, in a state of equilibrium. For its application, it requires that the vagina should be in a relaxed condition; but if the caoutchouc has been well prepared, this pessary may remain *in situ* two or three days without inconvenience. A necessary condition is that the uterus should be in a state of retroversion, for if there is anteversion the pessary is of no use. M. Paul has found the linseed vaginal cataplasms of M. Moutard-Martin of utility in uterine affections. In a case of metro-peritonitis, relief was produced very rapidly. The bags must not be too large, or their introduction becomes difficult. M. Bucquoy related that while an *interne* of Louis he had seen true cataplasms applied to the vagina. They were made thin and rolled around a small stick, which, having served as a means of introducing them, was withdrawn. This practice, which was an excellent one, seems to have entirely fallen into neglect, M. Fournier, of the Lourcine, being the only person who now employs vaginal cataplasms. M. Fournier makes use of voluminous cataplasms which

quite distend the vagina; and he states that he was first induced to resort to this practice by having observed the effects which had several times resulted from his pupils having forgotten to remove large wadding plugs that had been introduced. In each instance these, so far from having acted prejudicially, had proved of service in treating vaginitis. M. Moutard-Martin stated that he employed his bags in descent of the uterus, and especially in anteversion. It is in this case essential that the practitioner should introduce them himself, in order that they may be passed into the posterior *cul-de-sac*. The desire to pass urine and the difficulty of walking at once cease; and he never employs any other pessary.—*Med. Times and Gazette.*

FORMATION OF VAGINA WITHOUT EMPLOYMENT OF CUTTING INSTRUMENTS.

LeFort. (*L'Union Med.*, No. 91.)

A women, twenty-six years old, had suffered from general disorder at the menstrual periods since her fifteenth year. In consequence of the absence of the vagina, the menses had been replaced by supplementary hæmorrhages; hæmoptyses, bleeding from the integument of the limbs, excessively painful and often intolerable epistaxis. In 1872 she entered La Pitié, where Labbé performed ten operations, with the only result of creating a vulvar infundibulum a few centimetres in depth. Discouraged by this failure, the patient left the hospital after a sojourn there of eighteen months. But the pain and supplementary hæmorrhage continuing, she entered the Beaujon in July, 1875, where M. Anger succeeded LeFort, and performed the eleventh operation, which increased the depth of the infundibulum, but was followed by a severe attack of pelvi-peritonitis, which compelled LeFort to suspend interference until January, 1876.

He then operated by introducing a boxwood cylinder, terminating in a metallic knob, placed in connection with the positive pole of a battery of small elements, with sulphate of copper. The negative pole connected with a metallic disk, surrounded by moistened linen, and resting upon the abdominal surface. This weak current is not perceived by patients, and only produces an eschar, which is small in the immediate contact of the metallic rheophors. The apparatus was placed *in situ* every evening, and kept there all night. Little by little the stem made a way for itself in the vesico-rectal septum, and, on the 26th of February it had penetrated as far as the cervix uteri. Then, for the first time, the patient experienced, at her menstrual epoch, a moderate flow of blood from the vagina; though the latter still escaped with difficulty, as there was conjointly abdominal pain and slight hæmoptysis. But the treatment having been continned for another month, a canal was formed of sufficient size, and menstruation has since become painless, normal, and perfectly regular.

After two months' stay at Vesinet, in consequence of a pneumonia with which she was attacked, the patient re-entered the Beaujon July 1st, and the treatment was renewed—this time for the purpose of giving to the vagina a sufficient size. Finally, on the 29th of July it was possible to establish, by the aid of the speculum, a small and irregular cervix, ten centimetres in depth. An hysterometre, introduced by the orifice of the neck, penetrated to the extent of six and a half centimetres, the uterine cavity being, consequently, of normal length. The result, therefore, is complete. In order to render it permanent, and to prevent the retraction of the artificially formed canal, it will suffice for the patient to introduce nightly an intra-vaginal pessary, in the form of a cylindro-conical stem of boxwood or ivory—"that is," (adds the French author, with characteristic naiveté,) "in default of those physiological measures which her years might permit."

A Sign of Real Death in the Human Eye. Almes. (*Gazetta Medic. Ital. prov. Venet.*)—This sign consists in the retraction or non-retraction of the iris after puncture of the cornea and evacuation of the aqueous humour. When the pupil contracts, life still exists; when it remains fixed, that is an unfailing sign of death. The puncture of the cornea by the aid of a cataract knife or ordinary lancet is a harmless operation.—*Chicago Med. Jour. and Exam.*

A CASE OF SUPPOSED UTERINE CANCER, IN WHICH A SPONGE WAS RETAINED IN THE VAGINA FOR TWO YEARS.

BY EDWARD W. JENKS, M.D.,

Professor of Diseases of Women, Etc., Detroit Medical College.

I was summoned, not long since, to see a patient who was supposed by her friends and medical attendant to have cancer of the uterus, from a sanious vaginal discharge which had been profuse and offensive for over a year. It is but just to my friend, who called me in consultation, to say that he had formed no opinion of the case from physical examination, as he postponed that until I saw the patient with him.

The patient, Mrs. ——, sixty-two years of age, stated that she had ceased menstruating twelve years previous; that she was the mother of several children, and had always possessed good health until the present difficulty. The discharge she said was not only very offensive, but exhausting and very irritating. Upon examination the external genitalia were seen to be deeply excoriated and the inner part of the thighs in a similar condition. Carrying a finger into the vagina, I could distinctly feel at the uterine extremity a soft immoveable mass, unlike any morbid growth I had ever before encountered. I then inserted a speculum and saw that it was a sponge quite firmly held in position. A portion seemed almost encysted, so that the force required for its removal by dressing forceps tore it into pieces. As the sponge was removed the atrophied, uterine neck, and the vagina surrounding it, were seen to be ulcerated and bleeding surfaces.

The patient informed me that she had formerly been troubled with "falling of the womb," for which she had been in the habit of having sponges inserted; that the last one was put in by a physician two years before, which she was quite sure she had afterwards removed. Soon after this she began to have the offensive discharge which occasioned my visit. It is probable that she may have removed a portion of the sponge that was inserted, or may have removed none, but thought she had. Only for the peculiar condition of the neck of the uterus and the vagina, occasioned by the senile changes of these organs, it could be hardly possible for the sponge to be so firmly retained such a length of time in the superior portion of the vagina; and at no other time of life than after the menopause, could a foreign substance like a sponge be in constant apposition with the neck of the uterns for two years and produce such slight derangement. It is needless to add that with the removal of the sponge the patient made a rapid recovery, with no other treatment than the use of detergent vaginal washes.—*Chic. Med. Jour. and Ex.*

Four Children at a Birth.—By Henry H. Thorpe, M.D., of Liberty Hill, Williamson County, Texas.—The following case of pregnancy has just occurred in my practice:—On the night of the 13th of September I was called to attend Mrs. S., mother of seven children, having been delivered of twins at fourth pregnancy. I found os fully dilated. I ruptured membrane, after which she was soon delivered of a female child weighing three pounds. I then found two presenting, one cephalic, the other breech presentation. I ruptured the membrane, and succeeded in delivering both, when I found a fourth child, having a cephalic presentation; ruptured membrane, and fourth child was delivered. All are living, and are all doing well. One child weighed three pounds; two, three and a half, respectively; fourth, weight four pounds. The cords had separate attachments to placenta, but within a radius of one and a half or two inches. All are female children.

Case of Five Children at a Birth.—By James F. Pearce, M.D., of Mars Bluff, S. C.—Scilla M., a negro women, a multipara, gave birth, on the 11th of September, to five children. The labour was premature by one and a half months. The children were small but perfectly developed, ten and three-quarter inches long, and weighed (estimated, I had no opportunity of weighing) about two and a half pounds each. One female was attached to a separate placenta. One female and three male children attached by separate cords to same placenta. I would have preserved the placentæ, but they were burned immediately on account of a superstition prevalent amongst southern negroes. The mother is doing well. Four of the children died immediately; one lived several hours.

Materia Medica.

NOTES RELATIVE TO THE PHYSIOLOGICAL EFFECTS AND THERAPEUTICAL VALUE OF PICROTOXIN.

BY WILLIAM A. HAMMOND, M.D.

Professor of Diseases of the Mind and Nervous System in the University of the City of New York, etc.

Picrotoxin, the active principle of Cocculus Indicus, has recently been brought into notice as an agent of value in the treatment of certain organic diseases of the brain and spinal cord. M. Gubler, of Paris, has used it successfully in a case of Glosso-labio-laryngeal paralysis, in the dose of a milligramme (about the 1-70 of a grain) administered daily, hypodermically, and M. Dujardin-Beaumetz has given it in a case of epilepsy with a favourable result. So far as I am aware, it has not heretofore been employed in this country internally. Indeed, Wood and Bache, in the United States Dispensitory, while giving formulæ for the external use of picrotoxin and Cocculus Indicus, in certain skin affections, declare that neither substance is to be administered internally, and they cite a case, reported by Dr. W. B. Thompson, in which death in a child six years old, preceded by tetanic spasms, and extremely contracted pupils, resulted from the application of a strong tincture of the fruit to the scalp for tinea capitis.

Dr. R. M. Glover* performed a series of experiments with picrotoxin, which, although not attracting the attention they deserved, revealed very clearly the physiological properties of the substance.

As an illustration of the results of Dr. Glover's investigations, I quote the following detailed account of his second experiment:

"A bull-dog had thirty grains of the poison inserted under the skin of the axilla. In ten minutes tremours came on. In a quarter of an hour he had a stool and began to run backwards. He then stopped and commenced to make forward movements with his fore-paws, as if swimming, and to scratch the ground with his fore-feet. At the twentieth minute he vomited and seemed to have little power over his limbs; in two minutes more he passed urine and feces, and again began to scratch the ground. Frequent vomiting and salivation ensued, and he had bloody stools. At about the twenty-seventh minute there were tremours of the whole body and backward movements of the head. He continued thus, frequently passing urine and bloody stools, and occasionally moaning. In an hour and twenty minutes he had a violent spasm of opisthotonos. He had, also, several of the backward movements. A bloody discharge was constantly flowing from the rectum, and saliva from the mouth. The breathing laborious, and the heart's action frequent. The spasms of opisthotonos became absolutely dreadful. In their interval the animal staggered and occasionally fell down, with dilated pupils and blood-shot eyes. He would sometimes batter the ground with his head, and grind and gnash his teeth so that the sound could be heard for some distance. The mouth was filled with dust, and bloody. At about the second hour the symptoms began to abate somewhat, and in the course of the day he got gradually better."

"In three days he got comparatively well, but still had constant tremours, was stupid and had little appetite. I now inserted two scruples under the skin of the groin. The symptoms were very similar to those which occurred in the first experiment. The retrograde movements were occasionally very distinct, and the animal while lying on the ground would sometimes work himself round in a circle. At the forty-fifth minute he got up and rushed forward, a terrific object, the saliva and bloody foam flying in sheets from his mouth and his eyes glaring. He suddenly stopped, ran right backwards, and was seized with a violent fit of tetanus, at the end of which he was dead."

"On opening the body, the facts and appearances observed were as follows:—Almost total extinction of the muscular irritability: the heart was irritable, the auricles much more so than the ventricles. Both cavities of the heart were distended with black, fluid blood; the lungs, though somewhat darker than natural, were crepitant and collapsed. The stomach

* On the Physiological Properties of Picrotoxin. *Edinburgh Monthly Journal of Medical Science.* Vol. XII., 1851, p. 305.

and intestines showed considerable marks of irritation. The peristaltic action went on. The brain and its membranes were greatly congested, especially the lower portion, the *cerebellum*, *corpora quadrigemina* and upper portion of the spinal cord. There was much bloody serum in the ventricles of the brain."

From this and other experiments, Dr. Glover concludes that the action of picrotoxin is especially directed to the cerebellum and corpora quadrigemina, by which action the tendency uniformly exhibited to go backwards is a special result. He regards his investigations as bearing a close relation to those of Flourens, in which these organs were removed.

He also shows that the spinal cord was powerfully affected; and, in the animals in which the examinations were made, that the bodily temperature was extraordinarily augmented. In one case, on cutting the muscles of the chest, immediately after death, they were found to be absolutely *hot*, a thermometer was inserted into them as soon as possible, and it instantly rose to 115°, above which point it was not graduated.

It will, therefore, be at once perceived that in picrotoxin we have an agent capable of producing very decided effects, and one which we should, *a priori*, expect to be of great value in certain diseases of the nervous system.

My own experiments with the substance, performed upon dogs, have been equally conclusive with those of Dr. Glover. I found that ten grains, hypodermically administered in solution in water, were sufficient to produce death; the *ante mortem* phenomena not differing essentially from those noticed by Dr. Glover. My object, however, being at present more to give the results of my experience with picrotoxin as a remedial agent in the treatment of disease, I reserve for another occasion the fuller discussion of its physiological properties.

The phenomena exhibited when picrotoxin is given in large doses to healthy animals, as well as the *post mortem* appearances, go to show that it is a powerful cerebro-spinal excitant. It would hence be inferred that it would be useful in those cases in which it was deemed proper to improve the nutrition of the brain and spinal cord by increasing the amount of blood circulating in their tissue, and in relieving passive congestions through its tonic effect upon the blood vessels.

The first case in which I employed picrotoxin was one of epilepsy, the patient being a gentleman who had for several years been under treatment with various bromides which, successful at first, had finally lost all power to control the paroxysms. I prescribed for him the one-hundredth of a grain of picrotoxin, in pill, three times a day. I soon ascertained that these doses were too small, no apparent effect being produced, and increased them to the one-fiftieth. At this time he was having two, and sometimes three, very severe paroxysms weekly, during which he bit his tongue severely, notwithstanding all preventive measures. From the day on which the doses were doubled, he has not, as he writes me, had a single attack, although over two months have elapsed.

Since then I have used it in forty-three cases of epilepsy, occurring in persons of both sexes and of all ages, from childhood to old age, and though the period is too short for me to express a decided opinion relative to its absolute curative power over this terrible affection, I am confident its influence is beneficial. Not only is the number of paroxysms diminished in nearly every case, but the force of the seizures is markedly lessened; and, in fine, there has been an entire cessation of attacks, which previously were of daily occurrence.

For children of from six to twelve years of age I give the one-hundredth of a grain three times a day. In those of from twelve years to twenty the fiftieth; while for adults I have carried it from the fiftieth to the tenth of a grain thrice daily. Beyond this latter quantity I have not yet had occasion to venture, though judging from the results of larger doses—five, ten, twenty and more grains—in dogs, I am quite sure it might be much more freely administered.

It should be stated that in several cases in which some one of the bromides was being administered, there was at first an increase in the number of attacks when picrotoxin was substituted. Gradually, however, as the sys

tem came under its influence, this proclivity disappeared.

Doubtless, there are cases of epilepsy that would be aggravated by treatment with picrotoxin, and some of those now under treatment may be of this category, but the short time which has elapsed is scarcely sufficient to demonstrate the fact. It can only be determined by greatly increased experience, and it is with the view of inducing others to make use of the agent in question that I have cited the foregoing cases.

Chorea.—In this affliction my experience is very decidedly to the effect that we have in picrotoxin a remedy of great value—one fully equal if not superior to any now in general use. I have treated seven cases occurring in children under the age of puberty with picrotoxin, in doses of the one-hundredth of a grain three times a day. Two of these were free from all choreic symptoms in fifteen days, one in twenty days, and four are still under treatment, though apparently gradually improving. Two cases in adults are as yet not materially benefited, though I have increased the doses to the one-twenty-fifth of a grain. I propose to carry them very considerably higher if necessary.

Anapeiratic Paralysis.—In one case of this affection, produced by excessive use of the pen, in a copying clerk, I am using picrotoxin with apparent benefit. If the disease is, as there is every reason to believe, due to exhaustion of nerve-cells in anatomical and physiological relation with the affected muscles, this remedy ought, on sound theoretical grounds, to be of service in promoting the nutrition of the overworked organs. As yet the time of treatment in the case in question has not been sufficient for the determination of the point. The patient takes the fiftieth of a grain three times a day.

Spinal Irritation.—In spinal irritation, or anæmia of the posterior columns of the cord, my experience with picrotoxin has been gained by treating eleven cases in part with the remedy—the other measures, however, consisting of counter irritation and the moderate use of malt liquors, light wines, and, in a few cases, brandy. As this disease almost always disappears under treatment calculated to improve the nutrition of the cord, and to stimulate the vaso-motor system, I am not able to say more in favour of picrotoxin than that it apparently simply fulfils the place of strychnia and phosphorus.

In those serious organic affections of the cord, consisting essentially of low chronic inflammatory processes — progressive muscular atrophy, glosso-labio-laryngeal paralysis and locomotor ataxia, for instance, picrotoxin will probably be found advantageous. I am now using it in a case of the first named affection, the subject of a recent clinical lecture before the class of the University Medical College, a case of the second is as we have seen reported cured from Paris, and several cases of the third are now being treated by me with it, but as yet without definite result.—*St. Louis Clinical Record.*

Salicylic Acid.—Mr. A. N. Cookson, in reply to a correspondent in the *Lancet*, of the 16th inst., writes the following:—"I think he will find salicylic acid the most perfect preservative of solutions of alkaloids and vegetable infusions we possess next to spirits of wine. One grain to an ounce will be sufficient to preserve vegetable infusions equal to spirits of wine (1 in 6), and in some cases is far superior to it. Tartar emetic, for instance, which, in common with all tartrates in solution, rapidly developes fungi even in weak spirits, will be preserved without change in a solution of salicylic acid (one grain to an ounce) for months. If so small a quantity as one grain to an ounce be too irritating to the eye, the solution of atropine could be made four times the strength, and three drops of water added to each drop of solution at each time of using. It is said that brewers now use salicylic acid largely to preserve ale from mould, and prevent further fermentative changes in it, about eight grains to a gallon being sufficient for that purpose. "A Student" need not seek far for the explanation of a phenomenon of daily occurrence in chemistry—viz, that water should precipitate salicylic acid from its spirituous solution, being soluble in twice its weight of spirits, but requiring 320 parts of water for its solution. Precisely the same occurs if water be added to an equally strong solution of tolu in spirits, and in many other cases which might be cited."

PHOSPHIDE OF ZINC.

* * * * The great therapeutic value of the phosphide of zinc is declared in the most emphatic manner when used in the treatment of that protean form of disease, known as *neuralgia*. Compared with phosphorus as a curative agent in neuralgia, the phosphide of zinc has decidedly the advantage in numerous respects. While it is acknowledged by the best observers in the profession, that the former is seldom curative in doses less than one-twentieth of a grain, often calling for as high as one-tenth and one-fourth, the phosphide of zinc yields as reliable and more speedy results in doses of one-tenth to one-eighth of a grain. But few stomachs can tolerate more than one-thirtieth of a grain of phosphorus before manifesting symptoms of irritation, which, in connection with the "matchy" taste soon evolved in eructations following an efficient dose of phosphorus, seldom fails to engender disgust to its farther continuance. Nor are these disagreeable results altogether abolished by any of the multitudinous formulæ now in vogue. These drawbacks and inconveniences are, no doubt, caused by the length of time phosphorus remains in the stomach before it is absorbed. On the other hand, experience with the phosphide of zinc has proven that it enters the circulation far more rapidly than the element, and when administered in doses of from one-eighth to one-twelfth of a grain, produces its curative influence far more readily and is equally as permanent in therapeutic power.

In neuralgias, especially, those that are due to loss of nerve force or exhaustion of the general system from causes that have lowered the constitutional resistance of the vital economy, it acts sometimes so like a charm, as to challenge the gratitude of the patient and the admiration of the prescriber. * * * * *

Loss of memory, and impotency, are very favourably influenced by the phosphide of zinc. A gentleman engaged in large mercantile transactions, whose mind was kept intensely occupied with his business for many hours during the day, complained to me that he found his memory (that had always, up to a few months before, been remarkably retentive), becoming treacherous, that he was getting very forgetful. I gave him two dozen phosphide of zinc pills, requiring him to take one three times a day. I saw him a week after, when he said he saw no difference in his condition. The pills were continued three weeks longer by taking four a day, at the end of which time he was feeling much improved. With this he was encouraged to continue the treatment three months steadily, taking one-eighth of a grain three times a day, improving steadily until he regarded himself cured.

Another instance of a loss of sleep from continued mental anxiety, in which the patient complained of being unable to sleep longer than one or two hours during the night. Phosphorus in this case was ill borne. Phosphide of zinc in one-twelfth grain doses every four hours was prescribed. The remedy exercised good control over the case in a few days, which, after six weeks' constant use, restored the lost balance of the nervous system. * * * *

The formula recommended by Prof. Wm. A. Hammond is—

℞. Zinci phosphidi, grs. $1\frac{1}{10}$
Ext. nucis vomicæ, grs. $\frac{1}{4}$.

—*St. Louis Med. and Surg. Journal.*

Raw Onion as a Diuretic.—Dr. G. W. Balfour (*Edinburgh Med. Jour.*, September, 1875) records three cases in which much benefit was afforded patients by the eating of raw onions in large quantities. They acted as a diuretic in each instance. Case first was a woman who had suffered from a large white kidney and constriction of the mitral valve. Her abdomen and legs had been tapped several times, but after using onions as above she had been free from dropsy for two years, although still suffering from albuminuria. Case second suffered from cardiac disease, cirrhotic liver and ascites. Case third had ascites depending on tumour of the liver. In both of them the remedy had been used with good results. Both had been previously tapped, purgatives and diuretics alike having failed to give relief. All other treatment having failed to give relief, recourse was had to the onions. Under their use the amount passed steadily rose from ten to fifteen ounces to seventy-eight or a hundred.—*Detroit Review.*

Translations.

A Case of Asphyxia from Entrance of Food into the Air Passages during Forced Alimentation of the Œsophageal Tube.

From the *Gaz. Med.*, of Padua, we clip the following: After giving a brief history of a lunatic, of suicidal propensities, who would not take food, it states that after three days total abstinence from ingestion, it was resolved to resort to the tube:—

The operation was performed keeping the patient fixed horizontally, the tube was readily introduced. The skilful operator, used to this manœuvre, was sure of not having mistaken the passage, but, nevertheless, the patient being one who did not speak, he very prudently commenced with the injection of a little pure water, then a little more, then a larger amount; in all, 140 grammes of water, without the patient showing signs of the slightest suffering. They then went on to inject some thickened broth, and of this, 440 grammes were very slowly injected, and the patient remained very calm; the injection was stopped for a moment, and then, whilst they were on the point of beginning to inject another quantity of broth, the patient had an attempt at vomiting. The quantity of the thick broth which came from the lips was very small, but the mouth was full of it, and the patient gave a sudden sign of a feeling of suffocation. The tube was immediately withdrawn; the patient was raised up; artificial respiration was tried, but all was useless, for, in a few moments, death, by asphyxia, supervened.

The autopsy found that three-fourths of the liquid injected was still in the stomach, and that the other fourth, forced up the œsophagus, had then passed into the air passages, and was found partly sticking to the walls of the larynx and trachea, but mostly descended into the bronchi of both sides, as far as their second and third divisions. And this was the cause of death; while the cause of the effort at vomiting, had probably been a small ulcer, situated in the wall of the stomach, in its posterior aspect in front of the pancreas.

The case is not very novel, but it seemed to me worthy of publication, because it shows the possibility of asphyxia, by the entrance of food into the air passages, without the tube being, by mistake, introduced into these passages, and because, I hold, that to establish the importance and the probability of the dangers of forced nourishment, there is no other mode than to register in the annals of insanity all the misfortunes of a similar kind, which, gathered up and placed side by side with the very numerous cases of happy result, will be able to demonstrate more and more the advantages and the opportunity of this curative compensation.

A Case of Subcutaneous Emphysema During Parturition.

This rare complication of labour was noticed in the *Obstetric Clinic* of Mosca under the following circumstances: In the case of a woman, aged 24, primipara, the forceps were applied at her own house, to terminate the labour, too much prolonged by a contracted pelvis. During the operation a swelling of the skin of the neck was observed, above the right clavicle, gradually increasing during the uterine contractions.

On the entrance of the woman into the Clinical ward there was seen a swelling of the face, but more particularly of the eyelids, of the neck, and of the upper part of the chest. This swelling increased from moment to moment; with the fingers distinct crepitus was felt. In the respiratory organs nothing particular was found except a certain weakness of respiration on the right side. By the application of the forceps the delivery was finished. The fœtus was alive. The swelling disappeared after twelve days without any treatment.

This case of subcutaneous emphysema does not belong to those common cases of collection of air in the skin, observed in wounds of the neck, breast, trachea, and œsophagus. It was due to the passage of air from the lung to the skin, from laceration of the pulmonary tissue.

Basing one's opinion on the explanation of this phenomenon given by Traube and Oppolzer, it may be admitted that the air escaped from the lung by laceration of the pulmonary vesicles in consequence of intense muscular contraction, penetrated the bronchi, thence into the mediastinum and thence under the skin of the neck.—(*Lo Sperimentale,* through the *Gaz. Med. Ital.*

THE CANADIAN
Journal of Medical Science,
A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, DECEMBER, 1876.

☞ IMPORTANT.—Subscribers who have not paid their annual subscription, and do not receive bills with this number, will greatly oblige by sending their name and address to the Corresponding Editor.

PERSONAL.

The conscientious journalist has sometimes a very unpleasant duty to perform. Old abuses rankle deeply, and the ploughshare of public opinion must, at times, be driven home with power before the roots can be dragged from the soil in which they have long flourished. In attacking old grievances, we have the fear of no man before us; and if, in the performance of our duty as a journalist, and in our efforts to free the profession from the opprobrium of disreputable practices, we sometimes have to separate from old friends, so much more is the pity.

We prefer, in the discussion of measures of reform, the use of mild language, but there are times when forbearance ceases tobe a virtue, and things must be called by their right names, no matter whose sensibilities are hurt.

We do not intend to palliate wilful wrongdoing, either in friend or foe, and whenever the general good of the profession requires that we should lay the axe at the root of an abuse, however old it may be, we shall do the best we can to make the blow tell. Our duty to the profession first, friendship afterwards. Whenever we find it necessary to speak on any matter in which the good of the whole is concerned, there will be no mistaking our language.

In closing our first volume, we have every reason to be satisfied with the result of our labour. We were fully assured that an opening existed for such a work as ours before we began the CANADIAN JOURNAL OF MEDICAL SCIENCE, and one year's experience has fully justified the assurance. We knew well the amount of labour and expense required in the prosecution of the task we had before us, but it was a congenial kind of work, and we have been sustained in it by the conviction, that while we were furnishing a large amount of information, useful to our readers, and selected specially with a view to assist them in their laborious work, we have been mainly instrumental in removing certain abuses which were the opprobria and the scorn of the profession, and a disgrace to the Medical Council under whose auspices they were perpetrated. If nothing else has been accomplished by us than the removal from the Examining Board of the Medical Council of those members who, from its inception, had turned its deliberations into seasons of riot and revelry, we feel that our mission has not been in vain; but we believe we were also, to some extent, instrumental in removing from the recent Hospital Act some of its most objectionable features. Our work in that direction, however, is not yet finished. We hope, in time, to see that Institution become what it was originally intended to be, a TRUE *Provincial Charity*, in every sense of the word,—an Institution in which the poor from all parts can receive, *without charge*, whatever professional aid they may require, instead of being compelled, as now, to pay a large fee for that help which, in many instances, can only be afforded in an Institution of that kind.

In conclusion, we have to thank those kind friends everywhere who have given us their patronage and support, and we pledge ourselves to renewed efforts to merit a continuance of their good-will, and to make the CANADIAN JOURNAL OF MEDICAL SCIENCE, not only a necessary adjunct to every man's library, but a power for good in the land, an encouragement to those who do well, a terror to evil-doers.

We also feel a deep regret for those who have not been in a position to avail themselves of the treasures of our pages. They do not know how much they have lost, but as the next volume will undoubtedly be better than the last, they will have a chance of partially making up for lost opportunities.

TORONTO GENERAL HOSPITAL.

We hold it to be an anomaly that the destitute sick, no matter how urgent their need, cannot be received into our General Hospital without a large fee being first paid, either by friends or municipalities. It degrades what should be one of our noblest charities, to the level of a common boarding-house. If there is one thing more than another in which the civilization of this century excels that of all previous ages, it is in the provision made in all countries, but Ontario, for the care and relief of the sick poor. It is an old saying that what is every man's business is no man's business, and its truth is well exemplified in the provision made for the sick poor in this province.

The law virtually says that each county shall support its own poor in the Toronto General Hospital, and the result is that counties play shuttlecock with their poor, until they are no longer able to be tossed from place to place, and then it falls to the lot of the town where they drop last to provide shelter and help for the rest of their days. By this time, many cases that might have been restored to health and usefulness by timely assistance, will have become helpless burdens on the commonwealth for the remainder of their lives.

Only to-day application was made to us on behalf of a man in the remote parts of Muskoka who is poor and very sick, and thinks if he could get into the Hospital where he would have good medical advice and care, he might be restored to health and his family ; but instead of coming down at once he must wait till he can induce the authorities of that sparsely settled districts to pay for his admission, or, failing in that, he must remain at home to suffer and die, or become a burden to his family for life.

Again, yesterday an intelligent young Scotchman applied to us for admission to the Hospital, on account of a loathsome but curable disease ; but as he came from a distant part of the country, we could not ask the city to pay for his maintenance in that institution. Being too poor and too sick to return to his own town for the requisite order for admission to the Hospital, he is now compelled to subsist on the charity of the citizens of Toronto, while his disease is becoming chronic and more difficult of cure.

With the large surplus existing in our Provincial treasury, is it possible we cannot spare enough to make the Toronto General Hospital, in every sense of the word, a truly Cosmopolitan Charity. Our Great Exemplar has said, "The poor ye have always with you." "Inasmuch as ye have done it unto the least of one of these *my brethren*, ye have done it unto me." And the words have lost none of their significance, as they come down through the ages to our time.

We have great faith in the might of right, and we do not despair of being able to accomplish these objects in time.

We believe the present Government of Ontario is actuated by a desire to do the greatest good to the greatest number, and only needs to be convinced of the existence of any real grievance or want, to induce it to set vigorously to work to afford the necessary redress, and we are satisfied no more worthy object could engage its attention.

CHARLATANISM.

In no calling, perhaps,—certainly in none of the learned professions—has Charlatanism met with as large a share of success as in that with which we are identified. There are manifest causes for this fact. When disease or accident overtakes us, the interests involved are really greater than those with which men in other forms of occupation have to do. If a man's life or limb comes to be in jeopardy, he naturally feels as if his all, so far as the present sphere of existence is concerned, is at stake. Like the drowning man, he who is slowly but surely falling a victim to some terrible malady, eagerly seizes upon anything, however unphilosophical or preposterous, that offers even the faintest encouragement of relief. Men, in such a position, do not sit down soberly, as they do in their regular business, and count upon the costs or the probabilities. They are incurably ill, and they are told by a man or a woman, who deliberately trades upon imposture, that their malady is not beyond the possibility of recovery. They are generally not in a position to institute

comparisons between the genuine and the spurious, and so to reject the spurious and choose the genuine. If they are capable, to some extent, of forming a correct judgment in the matter, their peculiar situation and the tenacity with which we naturally cling to life, often control their better judgment, when they are positively assured by some dishonest mountebank that their case is "by no means hopeless." For these reasons, therefore, it is not a matter of wonder, at all, that quackery in medicine receives so large a share of public support. And we are not inclined to complain so much of the susceptibility of the public in this matter. On the contrary, we rather sympathise with the situation of the man whose case has reached the point at which it completely baffles all the remedies and appliances which the most consummate skill through legitimate channels can conceive, and he is induced, as a *dernier ressort*, to submit to the impostor, whose only aim is gain.

But we do feel anything but kindly towards the person who deliberately sets before himself the task of imposing upon public credulity, and whose mean, sordid determination to acquire wealth at any price, even at the sacrifice of human life, so long as such sacrifice cannot be brought directly to his door, drives him into a kind of practice which can only be characterised as infamous. Such an one seldom, if ever, pursues this kind of imposture without a full consciousness of the fact that he is simply trading upon public credulity. The wonders which he represents himself as capable of performing in his special field of imposition are, in his own consciousness, the veriest rascality. He makes his boast of the wondrous success he is capable of achieving in his infamous traffic. He laughs at the ease with which he can extort the exorbitant fee for his dishonest practice; and after a brief sojourn in each circle of his operations, he quietly retreats to some new and untried field. But we also cherish a special repugnance for such people as have it in their power to pursue the profession legitimately, but are so mercenary and unprincipled as to lend their influence to irregular practices which they cannot conscientiously support. In our profession there is yet much to learn. Comparing the state of medical science, to-day, with that of twenty-five years ago, we are compelled to admit advances almost beyond conception, in some directions. We rejoice at this fact. We are all willing, aye, anxiously vieing with each other in the struggle to shed and acquire new light upon many points still somewhat obscure. And, although what is recognized as novel in any department is often accepted with a degree of hesitation, yet it must be granted that no new principle or theory, possessing any real merit, is denied fair consideration at the hands of the intelligent portion of the profession, at least. Such persons are the more culpable, therefore, in view of the fact that they really do not throw any new light upon what is still obscure, but they consciously and intentionally enter upon a system of imposition of the most offensive character, for no higher motive than larger pecuniary rewards, and an easier method of following their profession.

Well, these various forms of imposture, while they are not, we conscientiously believe, contributing one fraction towards the relief of human suffering above what would be realized from legitimate practice, are draining the resources of many people ill able to endure the exorbitant draughts upon them. It is a painful phase of the subject, too, that such imposition always happens to be the most expensive to the patient, while his physical condition is no better, and often worse, than when he first submitted himself to the treatment. The curious feature, moreover, of such practice is, that those who pursue it never pretend to devote themselves to the management of any of the acute forms of disease, where skill and promptitude are required, but to the more chronic affections. Some of such cases occur in persons who are constitutional hypochondriacs, and whom the quack convinces that they are alarmingly ill, and then effects a cure which is published to the world as something extraordinary. Others dislike the taste of medicine, and if they can be relieved without it, as the quack informs them they can, they gladly avail themselves of the more pleasant remedy. Others have chronic rheumatic affections, which recur at regular intervals and then pass away, sometimes without any particular remedy. They are assured by

the impostor that these recurrences of their malady are quite unnecessary under proper management, and that he can guarantee absolute immunity from them for all time to come if the sufferer will only follow his directions and adopt his remedies.

Others again—unhappily a very large class—are the victims of some malignant disease, which has hitherto baffled all scientific treatment, and has had but one termination, no matter into whose hands the unfortunate patients fall. This class of sufferers deserve deep sympathy. They exhaust every legitimate resource, as a rule, and, still clinging to life, they very naturally embrace any chance which may be offered for its prolongation. They see the name of some extraordinary character, who undertakes, not only to cure, but to cure without the adoption of any severe remedy, and who gives testimonials as to the marvellous results of his method of treatment. Who can wonder if, in the peculiar mental condition accompanying such maladies, the patient yields to the plausible appeals to his credulity, as offering the only hope of recovery? *He* is to be pitied; but the man who deliberately victimizes him ought to be held criminally liable, and punished as a robber or trafficker in human life. The man who takes the money of another who is unable to judge as to the honesty or otherwise of his pretensions, should be as culpable as if he deliberately waylaid and robbed his victim, like the common thief. But law really cannot, in our judgment, be so regulated as to meet such a condition of things. It is true, laws may be enacted compelling men to acquire certain qualifications before they are permitted to follow their professions. They may compel medical aspirants to submit to certain regulations by which their preliminary education will be guaranteed. They may also exact compliance with a very critical course of study, and a satisfactory evidence of a well-grounded knowledge of the various subjects embraced in a medical curriculum. Here, however, they must stop. If a professional man or woman, who has complied with all the provisions of the law, so desires it, either or both may afterwards engage in the most questionable forms of practice, so long as they are clear of any criminal act, and there is absolutely no way of reaching them. The worst forms of imposition are practised at this very moment by persons legally qualified to follow the profession. Certain forms of treatment, good in themselves in the circumstances suited to them, are elevated to the position of remedies having a universal application, and represented as hitherto unknown to the profession. And so every conceivable form of disease is said to be amenable to the action of such remedies; and the public are being continually imposed upon to an extent which is really most deplorable.

We can justly claim credit in this Province for having done much towards elevating the standard of the profession. Our requirements, not only as regards preliminary education, but as regards professional standing, are highly creditable to us. But what is all this doing for us? Is either the profession or the general public receiving any protection against imposture? Is imposture any less prevalent at the present moment than it ever was? Is it not a fact that, with all the care and vigilance we have been exercising to compel those who really did not require to be compelled to reach a high standard of professional attainments, quackery is still rampant amongst us? Can it be denied that we are imposing a burdensome tax upon young men aspiring to professional respectability, without the slightest probability that, when they settle down to the practice of their profession, they will not be overreached by charlatans in the race for competence and independence? We may be told that this is a mercenary view to take of a profession so noble as ours, and that we ought not to look at the matter from such a standpoint. We admit that the pecuniary returns from the profession are trifling in comparison with its higher purposes—the relief of suffering, in whatever form it presents itself—in the most effectual manner. But we have a right to expect that after years of hard labour in qualifying ourselves for the pursuit of our profession, and many more spent, often in conditions of great discomfort and self-denial, we shall be able to reach, at least, a competence for declining years, if we happen to reach such a period. It is a painful fact that many of the most worthy members of the medical profession

barely reach middle age with shattered constitutions and little provision for their families after they are gone. In some instances, perhaps, improvidence may have to do with this condition of things, but, in a very much larger proportion of cases, it is a constant struggle against adverse circumstances. For much of our work we are never remunerated at all, and for much we receive very indifferent compensation. So that, with the greatest frugality consistent with sustaining the dignity of our profession, we can only hope to accumulate but very small fortunes.

Is there any remedy against the various forms in which imposture presents itself? We are often told that a most effectual check to imposture is the elevation of the standard of the profession. Well, we have been doing our duty in this respect beyond all question. The Ontario Medical Act, with all its apparent and real defects, reflects infinite credit upon the honesty of purpose of its original promoters and its present supporters. Taken in its entirety, we doubt if it is equalled by the medical law of any other country. This is saying a great deal for it, but no more, we conceive, than its real merits deserve. It is no exaggeration to say that its requirements, in the matter of preliminary education, are, at least, as high as those of any other country. Its professional requirements are no less commendable. Besides securing uniformity from all who seek authority to practise under it, the recent demand for annual examinations, from every student of medicine in this Province, is a feature not only most desirable, but also one not existing, we believe, anywhere else. So that we may fairly claim for the Ontario Medical Act that, in these particulars at least, it is in advance of that of any other country. But, beyond this, what is the law, as it now stands, accomplishing for honest men? The successful working of the Act is confessedly expensive. We have a Medical Council that requires a large sum of money annually to keep it in successful operation. To meet this pecuniary demand students are heavily taxed from year to year, until the period of their probation has expired. When they engage in the practice of their profession they must submit to an additional annual tax so long as they remain within the limits of the requirements of the law. Against all this professional men have certain penal clauses supposed to protect them against illegitimates or irregulars. But what benefit has thus far been secured from these penal clauses? Why, the very first attempt that is made to enforce them is met by the most violent opposition from almost every leading journal in the country, with the hearty concurrence of a large, and often very respectable, portion of the general public. The cry of persecution is raised if we even try to bring to justice a *Corn Doctor*. We are told that our system must certainly rest upon a very questionable basis if it is unwilling to stand upon its own individual merits, and that, if the public are willing to give their countenance to such characters, we should not object. We are also told by persons totally incompetent to be the judges, but holding a commanding position in society, that these mountebanks are very useful members of the community, and that much damage would result from their banishment from our midst. Our leading journals encourage such vicious imposture for the filthy lucre they derive from its perpetrators by inserting the most questionable advertisements, with testimonials as to the wonders such impostors have performed, and are capable of performing. In fact, their entire sympathies have thus far been extended to every species of questionable and irregular medical practice.

Such a state of things, it must be granted, is very disheartening to the honest medical man. After years of diligent application, in the course of preparation for his great life-work and the expenditure of a large amount of substance, he must settle down to work; and, despite the most conscientious devotion to his profession, the fact is ever present to him that a miserable charlatan is working side by side with him and deriving *much more substantial* support from the public in many instances.

It is very questionable if there really is any remedy for this evil. We might do as the profession in the United States have done. Let those who are disposed to follow their profession through the legitimate channel, enjoy the most abundant facilities for gratifying their laudable ambition through the various

teaching bodies in the country. Such men *will* devote themselves to the acquisition of all the useful information within their reach, under any circumstances. The rest *will* be humbugs, despite all the laws that can be enacted for their prevention. Impose no financial obligations upon the conscientious man for the sake of the mere sound of protecting him against imposition. Throw the profession open to all aspirants for a time, at least, and let us devote ourselves to the encouragement of every educational institution where thoroughness is demanded. Allow every man who calls himself doctor to stand upon his own individual merits; for that is really how the matter stands at present. Give quacks all the latitude they desire; because they have it at any rate, and honest men are suffering. If this course were adopted, the evil, as it now exists, *might* correct itself. The people might more quickly and effectually have their eyes opened to the enormity of many of the impositions now so kindly received and so prevalent. Public institutions, established upon a proper basis, would be no less extensively patronized. Much money that is now expended in a fruitless struggle would be saved, both to the student and to the honest medical man. But we are not sufficiently certain of such results to feel warranted in abolishing a law so valuable, in many of its features, as the present law is. We *are* certain that our profession is more expensive to us in this Province than anywhere else on this continent. But we grant, frankly, that we have *something* as an equivalent, although very much short of what we ought to have, and the promoters of the present law cannot be responsible, for the reasons before named. Until we are satisfied, therefore, that we would be no worse off without the present law, we would rather be inclined still to suffer on, for a time at least, in the particulars to which we have referred, with the hope that, as time goes on, the public will become more enlightened upon the enormity of the swindles of which they are, at present, the unsuspecting victims.

Personal.—Dr. Oronhyateka has returned from England.

Toronto School of Medicine.—The Third Annual Dinner took place on November 10th, at the Walker House, the dining hall of which was tastefully decorated. As on former occasions the dinner was a temperance one, and Mr. Walker's bill of fare required no stimulant to make it palatable in all its courses.

The chair was occupied by Mr. H. S. Griffin, B.A., a third-year student of the school, while Messrs. Grant and Orr acted as Vice-Chairmen. To the Chairman's right were Dr. Thos. Aikins, Dr. Workman, Dr. Uzziel Ogden, Rev. Dr. Nelles, Principal of Victoria University, Cobourg; Dr. Reeve; to his left, Dr. Richardson, Rev. Dr. Jackson, Dr. Langstaff, Dr. Thorburn, and Prof. Croft. Among the others present were Dr. Clark, Medical Superintendent of the Toronto Lunatic Asylum; Dr. R. Zimmerman, Dr. Barrett, Dr. Ross, Dr. J. S. King, Prof. Ramsay Wright, Prof. Pernet, Dr. Riddell, Dr. Oldwright, Dr. Ray, of Oshawa; Dr. McFarlane, Dr. Graham, A. MacMurchy, M.A., Rector Toronto Collegiate Institute; Dr. O'Reilly, of the Toronto General Hospital; Dr. Pyne, and others, including a large number of graduates and undergraduates.

Letters of apology were read from His Honour the Lieutenant-Governor, Hon. Edward Blake, Chief Justice Harrison, Hon. Mr. Mowat, Hon. Dr. Tupper, Hon. M. C. Cameron, Hon. Adam Crooks, Rev. Dr. McCaul, Prof. Wilson, Principal Cockburn, Dr. Fred. Wright, and Dr. H. H. Wright.

After duly discussing the good things, the Chairman proposed the usual preliminary toasts, which were loyally received. The next toast was the University of Toronto and University College, the Chairman remarking upon the anomalous position which the degrees of our University occupy when compared with the degrees of similar institutions in New Zealand, South Africa, and India, all of which are recognized by English Universities, while those of our *alma mater* are not. The toast was responded to by Professor Croft and Ramsay Wright, Prof. Pernet singing the "Marseillaise Hymn."

"The President and the Members of the Corporation of the Toronto School of Medicine" was then proposed, and duly responded to by Drs. Workman, Aikins, Richardson, U. Ogden,

Barrett, Thorburn, Graham, Oldright, McFarlane, George Wright, Reeve, Langstaff, and Zimmerman.

Mr. Orr, Vice-Chairman, proposed the "College of Physicians and Surgeons," which was responded to by Dr. James Ross.

On behalf of the graduates Drs. Riddell and Ray returned thanks.

Mr. Boulster sang the "Vicar of Bray," and, as an *encore*, "My Name is Dr. Quack." Dr. Nelles, of Victoria University, replied on behalf of the Educational Institutions. The usual toasts of the press, ladies, &c., followed, and the party broke up shortly after twelve, having spent a very enjoyable evening. We think such annual gatherings are beneficial to all concerned, and hope to see them continued for many years without a break, keeping up the bond of union of a common *alma mater* between past and present pupils of medical schools.

The *Canada Medical Recor* comes to us in what may be regarded as a new dress. We are glad to see it follow our example and cut its leaves. We intend to follow its example in some other respects. We never take up an uncut journal without wishing the publisher .... was near us, and we made up our minds long since that the readers of the CANADIAN JOURNAL OF MEDICAL SCIENCE should not have that stumbling-block in their path. Both of our Montreal *confreres* now cut their pages. Always welcome before, they are doubly so now.

INTERNATIONAL MEDICAL CONGRESS, GENEVA, 1877.—The International Medical Congress to be held at Geneva in 1877, under the auspices of the Swiss Federal Council and of the authorities of the Canton and of the city of Geneva, will be formally opened on Sunday, the ninth day of September, and remain in session one week. The committee charged with the organization of the Congress is officered as follows: President, Prof. C. Vogt; Vice-President, Dr. O. Lombard; Secretary-General, Dr. Prevost; Adjunct Secretaries, Drs. D'Espine and Reverdin. The proceedings of the Congress will be exclusively scientific. The official language will be the French. All communications relating to the Congress should be addressed to the Secretary-General, Dr. Prevost, at Geneva.

Communications.

To the Editor of the CANADIAN JOURNAL OF MEDICAL SCIENCE.

THE CAUSES OF SUPPURATION.

BY F. LE M. GRASETT, M.B.,
Edinburgh University.

During the discussion, following a paper, read by me, on antiseptic surgery, before the Dominion Medical Association, in August last, many of the speakers, then, showed by the remarks that fell from them, a want of familiarity with the causes which lead to suppuration, viewed from an antiseptic standpoint.

Thus, one gentleman stated as his experience of the use of carbolic acid, that in a case of empyema, in which he had diligently syringed out the cavity of the pleura with carbolic acid lotion, suppuration was not in any measure checked, but rather the reverse, which statement speaks more highly for the correctness of his observation than for the profoundness of his knowledge of the action of the common antiseptic agents. Another distinguished member of the Association could not accept the theory of germs causing putrefaction and suppuration, as in many cases matter is formed without any contact with the atmosphere, and he would shelve the difficulty of the cause of putrefaction by calling it "an order of nature," whatever that term may be held to express.

To remove such erroneous ideas, and others of a similar nature, I will give shortly the views of Professor Lister, the originator and able advocate of the antiseptic system on this subject. He puts the causes of suppuration under two classes, one of which is divided into two sub-classes, thus: (1) Excited action of nerves—(*a*) inflammatory; (2) Chemical—(*a*) putrefactive, and (*b*) antiseptic.

In the first class, suppuration is due to ordinary inflammation, an example of which is seen in the case of a deep-seated abscess, the inflammation is due to excited action of the nerves—the nerves are præternaturally irritated—and the cause of their being so irritated is, in the great majority of cases, due to tension, the result of blood or serum being allowed to collect and remain in a cavity or wound. Thus, take the case of a Syme's amputation at the

ankle joint, after approximation of the edges of the flaps in this operation more or less of a cavity is left by the large heel flap, in which serum is sure to accumulate. Now, supposing we take no precautions to allow this serum to drain off either by breaking a button-hole in the heel flap, or by using the drainage tubing of M. Chassaignac, we are pretty sure to find the pent up serum giving rise to tension, and the tension to inflammation, with the formation of pus. For this cause the surgeon always aims at a dependant opening and favourable position, so that tension from accumulation of blood and serum may be avoided Now, does the antiseptic system of dressings alter this principle of drainage? Most certainly not. Under that plan of dressing wounds, for the first twenty-four hours after an operation, the flow of serum from the cut surface is more abundant than under the ordinary method, because carbolic acid, in the form of spray and lotion, has been applied freely to cut surfaces, irritating them and causing them to pour forth more freely than if ordinary water, not impregnated with an antiseptic agent, had been used, but after the first day the discharge of serum gradually diminishes to almost *nil*, and is *not* succeeded by a discharge of pus, provided always that the drainage is free and the antiseptic dressing perfect.

To illustrate how the chemical causes, putrefactive and antiseptic, act in producing suppuration, let us take a simple case. Suppose we have removed a tumour and that there is not enough skin to cover the cut surface that is left, and we cover up this surface with dry lint, the first thing that happens is, the blood oozes into the lint and putrifies, and thus we get the cut surface exposed to putrid matter. If we remove this lint at the end of one or two days we will not find pus, and not until the fourth day are we sure to find it. But why should we have suppuration at all? The reason is that putrid matter is an unnatural irritating stimulus; the tissues being præternaturally stimulated form granulations, which granulations, being but a very imperfect form of fibrous tissue, on very slight irritation form pus, and the converse is, that it requires that the tissues should be stimulated for a considerable time before granulations are formed, for these granulations have no inherent tendency to form pus unless irritated, as may be shown by dressing a granulating surface with a clean metallic plate, which was long ago proved to prevent pus being produced by preventing external sources of irritation acting on the wound or sore, for as long as you protect the granulations from irritation, the process of degradation (*i.e.*, the formation of pus) ceases, and the higher organization (*i.e.*, the formation of fibrous tissue) begins.

Suppose that we take the same case, but, instead of using dry lint or water dressing, we apply lint dipped in an antiseptic lotion, will suppuration be thereby arrested? No, indeed, it will not. Granulations will form and suppuration follow just as in the case of the dry lint dressing, but, with this great difference, that if there is a cavity in connection with your wound, the putrefactive stimulus will spread wherever there is putrescible matter (thus, if it was a case of compound fracture it would spread to wherever there was any injured tissue in connection with the seat of fracture), but in the case of the antiseptic stimulus it is different, for it only acts on the actual spots to which it is applied.

Perhaps some will say, that we must have granulation and suppuration under any circumstances, but this is not the case, for if we put a perfect antiseptic dressing—and by a perfect antiseptic dressing, I mean one that, while keeping out the causes of putrefaction in the air, can itself be kept out of contact with the wound—upon a freshly cut surface, at the end of two, three, or four weeks, or any time, until the wound has healed, you will not find any sign of suppuration, but an epidermic covering will grow from the margins of the wound, or wherever else there may be pre-existing epithelium, until the wound has healed. This I have seen with my own eyes many, and many a time.

To remove silver stains from clothing, immerse the stained fabric for a few minutes in a concentrated solution of chloride of copper, then rub with a crystal of sodium hyposulphite, previously dipped into ammonia which has been diluted with an equal bulk of water. If the chloride of copper solution is quite neutral, the colour of the fabric will not be affected.

Miscellaneous.

Consanguineous Marriages.—At the Deaf and Dumb School, at Barcelona, Spain, there have been admitted two hundred and fifty-three children, during thirty-one years; of these only fifteen were the issue of consanguineous parents. This constitutes very small ground for the belief of the danger of such alleged misalliances.—*Independencia Medica.*

Mode of Instantly Arresting Palpitation.—In treating of nervous cardiopalmus, Dr. Maidier proposes to make the patient bend over on himself, with his head lowered and his arms dangling. In this way a greater quantity of blood flows to the brain, and the heart beats normally, so much the more if respiration is at the same time suspended.—(*Lo Sperimentale*, through the *Gaz. Med. Ital.*

Nitrite of Amyl in Tinnitus Aurium, nas been employed with advantage by Dr. Bargellini, who puts two or three drops into Politzer's air-bag, with which he inflates the middle ear through Eustachian tube. He uses it especially when chloroform and ether are of no avail, and he has never had any inconvenience of any sort from it. As tinnitus often arises from spasm of the muscles of the tympanum, he thinks its action can be explained as calmative, when the cause of the tinnitus resides in the tympanic cavity, (muscular and nervous spasm of the tympanic plexus) and does not arise from compression in the labyrinth.—*Lo Sperimentale*, through the *Gaz. Med. Ital.*)

"The Silly Medicine" is the name given to *hyoscyamine* by the patients in the West Riding Lunatic Asylum, the reason being that a full dose, as a grain and a half, tones down a vociferous, violent and destructive maniac in a very short time to a state of helplessness resembling imbecility. Such is the account given of it by Dr. Lawson of the Asylum named. He has used it in sthenic forms of mania, where the physique is not worn down by prolonged excitement, "especially in the aggressive outbursts which characterize life in a refractory ward, and in the treatment of chronic monomania of suspicion." A single dose commonly produces profound sleep, followed by a marked mitigation of the violent symptoms. The drug used by him is that manufactured by Mirk.—*Med. Soc. Kinas County.*

While there are, as Dr. Potter says, peculiar temptations for physicians to indulge any appetite they may have for the cup that makes the heart glad, there are exceedingly strong temptations for them to resist the inclination. As they know full well that moderate drinking is apt, sooner or later, to lead to over indulgence, and that just as soon as their patrons discover the propensity, away goes business and reputation. No other class of men, with the single exception of the clerical, are so easily and quickly affected in their business by the habit of drink as physicians. In these days, when doctors are so abundant, and such ample opportunities are afforded for a choice among many, the people in this enlightened age will not place their lives in jeopardy by knowingly employing a physician who habitually drinks even in moderation.—*Cincinnati Lancet and Observer.*

Syphilitic Phthisis.—M. Fournier (*Gazet. Hebdomad. di Med.—Lond. Med. Record*, July 15, 1876) concludes an elaborate lecture on the above subject with the following important axioms:

1. Tertiary syphilis can produce in the lungs lesions which either locally or by reacting on the general health simulate pulmonary phthisis.

2. These pulmonary lesions of syphilis are often amenable to specific treatment. However grave and important they may appear, they are far from being always beyond the resources of art.

3. Consequently when a case of pulmonary lesion presents itself, it is important, unless the existence of tuberculosis be quite certain, to ascertain if the lesion can be traced to syphilis. It is necessary always to bear in mind that syphilis is a possible cause of pulmonary lesions.

4. When syphilis can be suspected to be the cause, the primary indication is to prescribe specific treatment which in similar cases has been sometimes followed by the happiest results. —*Detroit Review.*

THE RELIEF OF PRICKLY HEAT.—Many persons are very subject to this annoying affection. They will be glad to learn that Surgeon-Major Dr. J. G. French, of the Indian medical service, in a contribution to the *Indian Medical Gazette*, says that we can cure prickly heat in three or four days by the application of a solution of sulphate of copper. This should be of the strength of about ten grains to the ounce of water, and the solution should be applied daily or oftener, by means of a camel-hair brush, or bit of sponge tied on the end of a stick. It is best applied after the morning bath, when the skin has been well rubbed with the towel, and it must be allowed to dry on the skin before dressing. Dr. French states that he has used this application for over thirteen years, and when regularly and properly applied, he has never known it to fail.—*Can. Med. Record.*

MEDICAL STUDENTS, 1876.—The following is a list of the number of students of medicine registered at the Royal College of Surgeons of England this session from the metropolitan schools, distinguishing the new entries for the session. It will be seen that the number of new students is large, especially at the great city hospitals:

St. Bartholomew's	374,	including	131	new entries.
Guy's	317,	,,	95	,,
University College	279,	,,	79	,,
St. Thomas's	177,	,,	43	,,
St. George's	136,	,,	33	,,
London	123,	,,	35	,,
King's College	105,	,,	28	,,
Middlesex	101,	,,	38	,,
St. Mary's	82,	,,	26	,,
Charing Cross	70,	,,	29	,,
Westminster	28,	,,	9	,,

The gross number registered amounts to 1,793, including 546 new entries.

CONCENTRATED INFUSION OF QUASSIA.—W. Easby, M.D., writes: "Quassia is a favourite tonic with many practitioners, especially those having large club and union practices. I have made infusion of quassia in the way I am about to describe for some time. I find it to answer the purpose as a bitter tonic, and it also keeps well. Pour on half a pound of quassia chips fifty ounces of boiling water, and let it stand in a warm place for four hours; when cold strain it through muslin, or filter into a bottle holding double the quantity, and then add two drachms of pure chloroform, and shake well for two or three minutes. It is now ready for use. The dose does not prevent the addition of other drugs, as iron or alkaline salts. It also saves the addition of spirit of wine, which must be added to all concentrated infusions to make them keep."

ON MITRAL BRUIT IN JAUNDICE.—Dr. Gangolphe (*Du Bruit de Souffle Mitral dans l'Ictère* Thèse de Paris, 1875), has seen nine cases in which a mitral regurgitant murmur accompanied jaundice. It was most marked in those cases in which the pulse was slow, and usually disappeared when the slow pulse disappeared. Gangolphe thinks the murmur due partly to a dilatation of the heart, but chiefly to a paralysis of the papillary muscles, caused by the circulation of the biliary principles in the blood. He refuses to allow anæmia any share in the begetting of the murmur, although in some cases, it will be noted, the murmur was prolonged into the arteries. The paralysis of the papillary muscles is caused by a fatty degeneration of the heart structure, secondary to the action of the biliary poisons. This thesis is an interesting and valuable contribution to the literature of jaundice.—*London Med. Record.*

GYNECOLOGY.—*Metastasis of Mumps in Women. Damorest.* (*Lyon Med.*, No. 22.)—The author, in view of the recognized sympathy between the parotid glands and the genitalia, refers to the fact that, in women, metastasis occurs rather to the mammary and vulvar glands than to the ovaries, while in boys the testicles are affected. He reports two cases, showing that the ovaries may be involved when females are attacked by mumps. Yet Trousseau, Grisolle, and Niemeyer never noted such an occurrence; and Meyner, (*Gaz. Med. de Lyon*, 1866,) publishes but one observation of the same. In the author's first case the parotiditis supplemented the menstrual flow, and the same was observed in the second case. In the latter, also, there was ovarian pain, and tenderness on both sides, with fever. Damorest concludes by remarking that it would be interesting to know whether, after such an attack, a young girl could become a mother.—*Chicago Medical Journal.*

Detection of Lead and Iron Bullets in Gunshot Wounds.—Dr. J. R. Uhler lately brought before the attention of the Maryland Academy of Sciences a method for the more certain detection of leaden and iron bullets when imbedded in the tissues, as in gunshot and shell injuries especially, when they have an obscure or curved course, and cannot be readily felt by the probe. The plan and its application are extremely simple. The wound is thoroughly cleansed with pure water by means of a syringe, after which a solution of nitric acid (5 to 15 drops to a drachm of distilled water) is injected into the wound, and allowed to remain a sufficient time to come in contact with and dissolve a portion of the ball. The injected fluid is then withdrawn either by syringe or by changing the position of the patient so as to let it run out into two lots. One of them is to be tested with iodide of potassium, when, if lead be present, the well-known yellow colour will be obtained. To the other a solution of sulphocyanide of potassium is added, which will turn red if iron be present, or ferro-cyanide of potassium to give a blue. It is claimed that the procedure is less irritating to the patient than probing.

Trepanning in Injuries of the Skull. —1. *Without delay* in all cases of distinct punctured fracture, to avert mischief by removing the fragments of the inner table.

2. In cases of compound comminuted fractures with depression (not in mere fissure with wounded scalp).

3. In simple depressed fracture, when, after a fair trial of other measures, the urgent symptoms of compression are persistent.

4. In compression from extravasated blood, when the position of the injury, or the existence of a fissured fracture, indicate the probability of a large artery, such as the middle meningeal, having been torn.

5. For intra-cranial suppuration, when the symptoms and the existence of the puffy swelling, or unhealthy state of the scalp wound, and bone, give an indication of the probable position of the pus.

6. In certain chronic cases, from disease or alterations in the bone following contusion or other injury, causing cerebral symptoms, such as local paralysis or epileptic fits. This last rule is by no means so imperative as the others —*Spence and Bryant.*

The Treatment of Ranula.—The Paris correspondent of the *British Medical Journal*, in his last letter, draws attention to the treatment of ranula, and alludes to the success attending injection of chloride of zinc, as practised by M. Panas. Dr. Morton, in a note on this, observes, without entering into any account of the morbid conditions to obstruction of a sub-lingual gland or duct, that practically the surgeon's intention is to make a permanent opening in the sac, one which will allow the saliva continuous and natural exit into the mouth. It occurred to Dr. Morton that the use of a metallic seton, acting to some extent as a drainage-tube, would attain this object, and two cases coming under his notice, he tried the following operation. An ordinary seton-needle, carrying medium-sized silver wire, having been passed directly through the sac-like tumour from one side to the other, the ends of the wire were brought forward, twisted together, and cut off, leaving a small ring of metal, half within and half externally. The wire was allowed to remain three weeks, then cut and withdrawn. It caused no irritation or impediment, and a patent orifice remained after removal. Both cases were permanently cured. The ordinary seton, made of silk or hemp, necessarily sets up inflammation, and may induce subsequent closure or fistulous opening. Injection of caustic fluids, as chloride of zinc, in ranula is open to objection, as destruction of tissue is not desirable, at least, in simple cases of obstruction.— *The Practitioner.*

Post-mortem of the Brain of Christopher Ward, who was convicted of the murder of his wife at the Brampton Assizes, last Spring :— "New York City, Asylum for Insane, 20th Nov., 1876. I certify that I was present at the *post-mortem* made upon deceased Christopher Ward, at the Rockwood Asylum, on 7th Nov., 1876. The brain was intensely congested in all its parts, and the cranial cavity contained several ounces of bloody serum. The

weight of the brain was fifty-two ounces. The meninges gave evidence of chronic inflammation, being thickened and leathery, and adherent to the calvarium in places. There were distinct points of softening at the apices of both hemispheres of the cerebrum, and in other localities which I cannot now exactly fix. From these appearances, taking in connection with the history of the case, I am of opinion that the patient, Ward, suffered from chronic insanity. (Signed), A. E. Macdonald, M.D., Medical Superintendent, New York City Asylum." Corroboration of the above by Drs. Fowler, Lavell, and Dickson: "We hereby certify that we were present at the autopsy of Christopher Ward, and that our opinions coincide in every respect with the certificate of Dr. Macdonald, both with reference to the appearances of the cranial contents, and the opinion of chronic insanity based thereon, coupled with the man's previous history. (Signed), Fife Fowler, M.D., Michael Lavell, M.D., and John R. Dickson, M.D." The following were the symptoms of Ward's case preceding his death:—His suspicion of poisoning by persons around him was persistent. He was very noisy in the nights, and urged for his release. A few days before his death he was seized with obstinate vomiting and constipation. The pulse was slow, full, and soft. The pupils very much dilated. He soon succumbed."

APPOINTMENTS.

Andrew Thomas Dunn, of the Township of Augusta, Esquire, M.D., to be an Associate Coroner in and for the united Counties of Leeds and Grenville.

William Hanover, of the Village of Almonte, Esquire, M.D., to be an Associate Coroner in and for the County of Lanark.

Births, Marriages, and Deaths.

BIRTHS.

In Lindsay, on the 27th ult., the wife of Dr. Kempt, of a daughter.

On Monday, the 13th inst., at No. 99 Charles-street, Toronto, the wife of W. H. Ellis, M.B., of a daughter.

On Monday morning, 20th November, at 195 Carlton street, corner · ntario, the wife of Dr. White, of a son.

DEATHS.

On Nov. 13th, at 15 Sultan-street, S. L. Bates, M.D., aged 26 years and 3 months.

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